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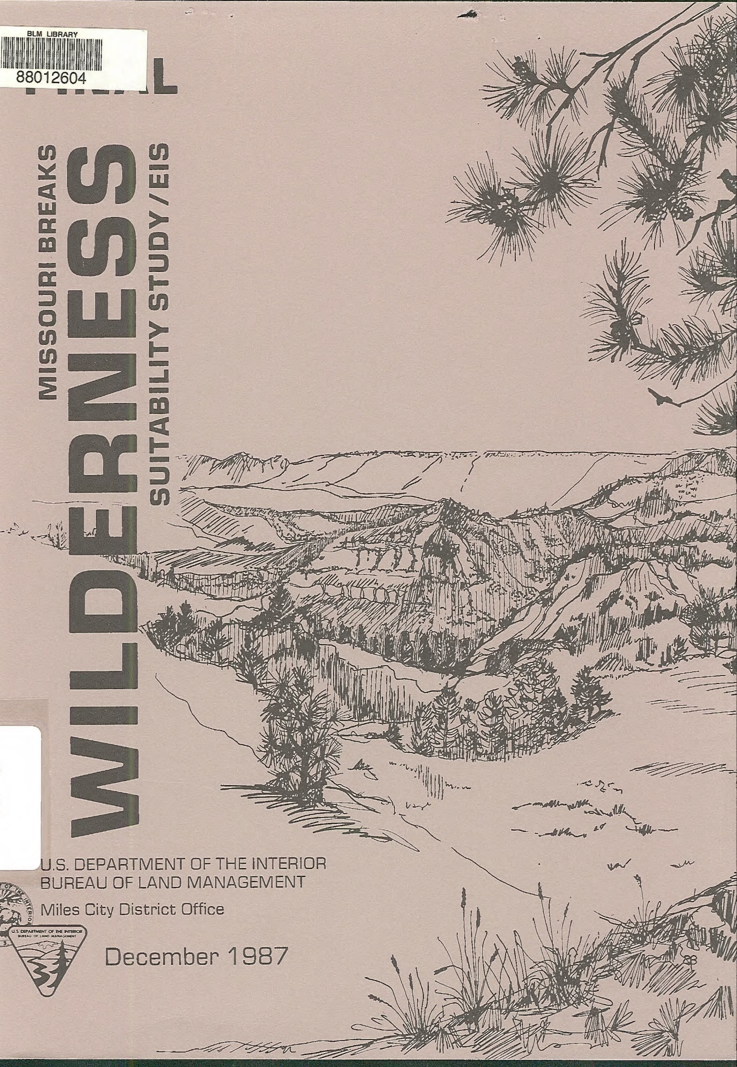

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U.S. DEPARTMENT OF THE INTERIOR
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Prepared by

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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MISSOURI BREAKS WILDERNESS ENVIRONMENTAL IMPACT STATEMENT

Responsible Agency: United States Department of the Interior
Bureau of Land Management

Draft ( ) Final (X)

Administrative Action ( ) Legislative Action ( )

Abstract: This EIS assesses the environmental consequences of managing 12 Wilderness Study Areas (WSAs) as wilderness or nonwilderness. The alternatives assessed in this EIS include: (1) a No Wilderness Alternative for each WSA, (2) an All Wilderness Alternative for each WSA, and (3) Partial Wilderness Alternatives for the Cow Creek, Antelope Creek, Seven Blackfoot, Billy Creek, and Terry Badlands WSAs. The 12 WSAs are listed below with an identification number, acreage, and Proposed Action for each WSA.

List of Wilderness Study Areas

WSA Name	Number	Acreage	Proposed Action
Dog Creek South	MT-068-244	5,150	No Wilderness Alternative
Stafford	MT-066-250	4,800	No Wilderness Alternative
Ervin Ridge	MT-066-253	10,200	No Wilderness Alternative
Woodhawk	MT-068-246	8,100	No Wilderness Alternative
Cow Creek	MT-066-256	34,050	Partial Wilderness Alternative
Antelope Creek	MT-065-266	12,350	Partial Wilderness Alternative 1
Bridge Coulee	MT-024-675	5,900	No Wilderness Alternative
Musselshell Breaks	MT-024-677	8,650	No Wilderness Alternative
Billy Creek	MT-024-633	3,450	No Wilderness Alternative
Seven Blackfoot	MT-024-657	20,250	Partial Wilderness Alternative 1
Burnt Lodge	MT-065-278	13,730	All Wilderness Alternative
Terry Badlands	MT-024-684	42,950	Partial Wilderness Alternative 2

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SUMMARY

The purpose of the proposed action is to manage and preserve the wilderness characteristics on 79,150 acres in one wilderness study area (WSA) and portions of four WSAs. The purpose is to also manage 90,430 acres in seven WSAs and portions of four WSAs without consideration for wilderness characteristics. This environmental impact state (EIS) assesses the environmental consequences of managing those twelve WSAs as wilderness or nonwilderness.

During the scoping process, significant environmental issues were developed for each of the twelve WSAs. The issues which are common to all WSAs are impacts on wilderness values, impacts on big game population, impacts on livestock management and existing range project maintenance levels, and impacts on recreational ORV use levels. The impacts on oil and gas development levels are analyzed for six WSAs. The impacts on construction of new range improvement projects are analyzed for three WSAs. The impacts on coal mining levels are analyzed for one WSA.

SUMMARY OF THE PROPOSED ACTION

WSA	ACRES RECOMMENDED SUITABLE	ACRES RECOMMENDED NOT SUITABLE
Dog Creek South		5,150
Stafford		4,800
Ervin Ridge		10,200
Woodhawk		8,100
Cow Creek	21,590	12,460
Antelope Creek	9,600	2,750
Bridge Coulee		5,900
Musselshell Breaks		8,650
Billy Creek		3,450
Seven Blackfoot	5,710	14,540
Burnt Lodge	13,730	
Terry Badlands	28,520	14,430
TOTALS	79,150	90,430

ALTERNATIVES AND IMPACT CONCLUSIONS BY WSA

DOG CREEK SOUTH

Proposed Action (No Wilderness / No Action Alternative)

None of the 5,150 acres of Dog Creek South WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Fergus MFP. Management on 3,902 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Two gas wells, one successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 150 recreation vehicle days annually.

The major impact is that wilderness values would be reduced in the northwest portion of the WSA due to gas well facilities and drilling activities.

All Wilderness Alternative

All 5,150 acres of the Dog Creek South WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill two gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $275 and 75 hours of labor time annually. Annual recreation ORV use would decline from 150 recreation vehicle days to zero.

STAFFORD

Proposed Action (No Wilderness / No Action Alternative)

None of the 4,800 acres of Stafford WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the South Bearpaw MFP. Management on 4,346 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Two gas wells, one successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 75 recreation vehicle days annually.

The major impact is that wilderness values would be reduced in the northcentral portion of the WSA due to gas well facilities and drilling activities.

All Wilderness Alternative

All 4,800 acres of the Stafford WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill two gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $130 and 35 hours of labor time annually. Annual recreation ORV use would decline from 75 recreation vehicle days to zero.

ERVIN RIDGE

Proposed Action (No Wilderness/ No Action Alternative)

None of the 10,200 acres of Ervin Ridge WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the South Bearpaw MFP. Management on 5,061 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) desgination and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Eight gas wells, three successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 100 recreation vehicle days annually.

The major impact is that wilderness values would be reduced along the northern and western portion of the WSA due to gas well facilities and drilling activities.

All Wilderness Alternative

All 10,200 acres of the Ervin Ridge WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease. Livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill eight gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $240 and 65 hours of labor time annually. Annual recreation ORV use would decline from 100 recreation vehicle days to zero.

WOODHAWK

Proposed Action (No Wilderness/ No Action Alternative)

None of the 8,100 acres of Woodhawk WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Fergus MFP. Management on 3,477 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Four gas wells, one successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 400 recreation vehicle days annually.

The major impact is that wilderness values would be reduced in the southwest portion of the WSA due to gas well facilities and drilling activities.

All Wilderness Alternative

All 8,100 acres of the Woodhawk WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill four gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $85 and 20 hours of labor time annually. Annual recreation ORV use would decline from 400 recreation vehicle days to zero.

COW CREEK

Proposed Action (Partial Wilderness Alternative)

Approximately 21,590 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The 21,590 acres would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Of the remaining 12,460 acres of the WSA, none would be recommended as suitable. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Management on 2,018 acres would be consistent with UMWSR designation and associated plans.

Wilderness values would be maintained on 21,590 acres and enhanced due to the revegetation of vehicle ways. Wilderness values would be reduced in most of the unsuitable 12,460 acres of the WSA due to gas well facilities and drilling activities. The opportunity to drill 32 gas wells would be foregone. Mule deer population levels would increase. Range permittees would incur additional costs of $564 and 150 hours of labor time annually. Annual recreation ORV use would decline from 450 recreation vehicle days to 200.

No Wilderness/No Action Alternative

None of the 34,050 acres of Cow Creek WSA would be recommended as suitable for wilderness. Management would be in compliance with the South Bearpaw MFP. Management on 2,018 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources, or timber harvest. Fifty gas wells, ten successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 450 recreation vehicle days annually.

The major impact is that wilderness values would on approximately 1/3 of the WSA due to gas well facilities and drilling activities.

All Wilderness Alternative

All 34,050 acres of the Cow Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill fifty gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $1,165 and 310 hours of labor time annually. Annual recreation ORV use would decline from 450 recreation vehicle days to zero.

ANTELOPE CREEK

Proposed Action (Partial Wilderness Alternative 1)

Approximately 9,600 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Management of 4,373 acres of lands classed as "scenic" would be consistent with UMWSR designation and associated plans.

Of the remaining 2,750 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Phillips MFP. None of this acreage is in the Upper Missouri Wild and Scenic River (UMWSR). No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be maintained on 9,600 acres and enhanced due to the revegetation of vehicle ways. Wilderness values would be reduced in the eastern 2,750 acres of the WSA due to gas well facilities and drilling activities. The opportunity to drill eight gas wells would be foregone. Mule deer population levels would increase. Range permittees would incur additional costs of $460 and 120 hours of labor time annually. Annual recreation ORV use would decline from 300 recreation vehicle days to 50.

No Wilderness/No Action Alternative

None of the 12,350 acres of the Antelope Creek WSA would be recommended as suitable for wilderness. Management would be in compliance with the Phillips MFP. Management of 4,373 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Twelve gas wells, three successful, are projected to be drilled. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 300 recreation vehicle days annually.

The major impact is that wilderness values would be reduced in the northern portion of the WSA due to gas well facilities and drilling activities.

Partial Wilderness Alternative 2

Approximately 2,750 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 9,600 acres of the WSA, none would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Phillips MFP. Management on 4,373 acres classed "scenic" as lands would be consistent with Upper Missouri Wild and Scenic River ((UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be maintained 2,750 acres and enhanced due to the revegetation of vehicle ways. The major impact is that wilderness values would be reduced in the northern portion of the 9,600 acre portion of the WSA due to gas well facilities and drilling activities. The opportunity to drill four gas wells would be foregone. Mule deer population levels would increase. Range permittees would incur additional costs of $130 and 20 hours of labor time annually. Annual recreation ORV use would decline from 300 recreation vehicle days to 250.

All Wilderness Alternative

All 12,350 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The opportunity to drill twelve gas wells would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $530 and 140 hours of labor time annually. Annual recreation ORV use would decline from 300 recreation vehicle days to zero.

BRIDGE COULEE

Proposed Action (No Wilderness / No Action Alternative)

None of the 5,900 acres of Bridge Coulee WSA would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 100 recreation vehicle days annually.

All Wilderness Alternative

All 5,900 acres of the Bridge Coulee WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. Range permittees would incur additional costs of $145 and 40 hours of labor time annually. Recreational ORV use would decline from 100 recreation vehicle days to zero.

MUSSELSHELL BREAKS

Proposed Action (No Wilderness / No Action Alternative)

None of the 8,650 acres of Musselshell Breaks WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Jordan-North Rosebud transition MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 150 recreation vehicle days annually.

All Wilderness Alternative

All 8,650 acres of the Musselshell Breaks WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $360 and 95 hours of labor time annually. Recreational ORV use would decline from 150 recreation vehicle days to zero.

BILLY CREEK

Proposed Action (No Wilderness / No Action Alternative)

None of the 3,450 acres of Billy Creek WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 25 recreation vehicle days annually.

Partial Wilderness Alternative 1

Approximately 1,650 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 1,800 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 25 recreation vehicle days annually.

Partial Wilderness Alternative 2

Approximately 550 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 2,900 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 25 recreation vehicle days annually.

All Wilderness Alternative

All 3,450 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. Range permittees would incur additional costs of $60 and 15 hours of labor time annually. Recreation ORV use would decline from 25 recreation vehicle days to zero.

SEVEN BLACKFOOT

Proposed Action (Partial Wilderness Alternative 1)

Approximately 5,710 acres of the Seven Blackfoot WSA would be recommended as suitable for wilderness designation. This acreage is in two segments. One segment encompasses the headwaters of Big Coulee at the western end of the northwestern roadless area. It comprises 1,160 acres of that 3,950 acre roadless area. The other segment is 4,550 acres of the 4,850 acres northeastern roadless area. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 14,540 acres of the WSA, none would be recommended as suitable for wilderness. The 14,540 acres is composed of the entire 11,450 acres of the southern roadless area, the remaining 2,790 acres of the northwest roadless area, and 300 acres (peninsulas) of the northeastern roadless area. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 200 recreation vehicle days annually.

No Wilderness/No Action Alternative

None of the 20,250 acres of Seven Blackfoot WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained on most of the WSA. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 200 recreation vehicle days annually.

Partial Wilderness Alternative 3

Approximately 11,030 acres of the Seven Blackfoot WSA would be recommended as suitable for wilderness designation. This is the entire southern roadless area, except for a 420 acre "peninsula" on the east edge. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. In the draft EIS the acreage for this alternative was incorrectly listed as 11,450. The boundary of this alternative in this document is identical to that in the DEIS.

Of the remaining 9,220 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be maintained on the entire area and enhanced on 11,030 acres due to the revegetation of vehicle ways. Mule deer population levels would increase. Range permittees would incur additional costs of $395 and 105 hours of labor time annually. Recreation ORV use would decline from 200 recreation vehicle days to 25.

All Wilderness Alternative

All 20,250 acres of the Seven Blackfoot would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $540 and 145 hours of labor time annually. Annual recreation ORV use would decline from 200 recreation vehicle days to zero.

BURNT LODGE

Proposed Action (All Wilderness Alternative)

All 13,730 acres of the Burnt Lodge WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. Mule deer and elk population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $660 and 75 hours of labor time annually. Annual recreation ORV use would decline from 500 recreation vehicle days to zero.

No Wilderness/No Action Alternative

None of the 13,730 acres of Burnt Lodge WSA would be recommended as suitable for wilderness under this alternative. Management would be in compliance with the Valley MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources, or timber harvest.

Wilderness values would be retained. Existing livestock management would continue and range projects would be maintained. ORV use would continue at 400 recreation vehicle days annually.

TERRY BADLANDS

Proposed Action (Partial Wilderness Alternative)

Approximately 28,520 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Of the remaining 14,430 acres of the WSA, none would be recommended as suitable. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Wilderness values on 28,520 acres would be enhanced due to the revegetation of vehicle ways. Mule deer population levels would increase by approximately 5 percent. Most wilderness values would be destroyed on 7,600 acres due to coal mining. Range permittees would incur additional costs of $576 and 155 hours of labor time annually. Annual recreation ORV use would decline from 400 recreation vehicle days to 25.

No Wilderness/No Action Alternative

None of the 42,950 acres of Terry Badlands WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the New Prairie transition MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Wilderness values would be retained on 28,520 acres. Most wilderness values would be destroyed on 7,600 acres due to coal mining. Annual recreational use would decline from 400 to 325 recreational visitor days.

Partial Wilderness Alternative 1

Approximately 14,670 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunity for solitude, and supplemental scenic values. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Of the remaining 28,280 acres of the WSA, none would be recommended as suitable.

Wilderness values would be enhanced on 14,670 acres due to revegetation of vehicle ways. Most wilderness values would be destroyed on 7,600 acres due to coal mining. Range permittees would incur additional costs of $70 and 20 hours of labor time annually. Annual recreational ORV use would decline from 400 recreation vehicle days to 300.

All Wilderness Alternative

All 42,950 acres of the Terry Badlands WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Wilderness values would be maintained on the entire area and enhanced due to the revegetation of vehicle ways. The major impact would be that the opportunity to mine approximately 7,600 acres of coal would be foregone. Mule deer population levels would increase by approximately 10 percent. Range permittees would incur additional costs of $1,150 and 295 hours of labor time annually. Recreational ORV use would decline from 400 recreation vehicle days to zero.

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ONE

INTRODUCTION

PURPOSE AND NEED

The purpose of the Proposed Action is to manage and preserve the wilderness characteristics on 79,150 acres of public land in the Lewistown and Miles City Districts. "To secure for the American people of present and future generations the benefits of an enduring resource wilderness" (Wilderness Act 1964). Approximately 90,430 acres would be released to management under multiple use for purposes other than preservation as wilderness.

The Missouri Breaks Final Wilderness Suitability Study/Environmental Impact Statement (EIS) is prepared in response to the Federal Land Policy and Management Act (FLPMA) of October 21, 1976. This law directed the Bureau of Land Management (BLM) to inventory, study and then report to Congress through the Secretary of Interior and the President, the suitability or nonsuitability of BLM Wilderness Study Areas (WSAs) for inclusion in the National Wilderness Preservation System (NWPS). This document analyzes the environmental effects which are likely to occur if the Wilderness Study Areas (WSAs) are managed under a variety of alternative management strategies, including wilderness or nonwilderness. This analysis is needed to fully comply with the provisions of the National Environmental Policy Act (NEPA).

List of Wilderness Study Areas

WSA Name	Number	Acreage
Dog Creek South	MT-068-244	5,150
Stafford	MT-066-250	4,800
Ervin Ridge	MT-066-253	10,200
Woodhawk	MT-068-246	8,100
Cow Creek	MT-066-256	34,050
Antelope Creek	MT-065-266	12,350
Bridge Coulee	MT-024-675	5,900
Musselshell Breaks	MT-024-677	8,650
Billy Creek	MT-024-633	3,450
Seven Blackfoot	MT-024-657	20,250
Burnt Lodge	MT-065-278	13,730
Terry Badlands	MT-024-684	42,950
		169,580

There were 12 Wilderness Study Areas (WSAs) in the (Draft) Missouri Breaks Suitability Study/EIS. In December 1982, the Secretary of the Interior directed the BLM that WSAs of less than 5,000 acres in size or that met certain other criteria were not under the wilderness review mandate in Section 603 of FLPMA. The Montana State Director received permission to study those WSAs or portions of WSAs under the provisions of Section 202 of FLPMA. (Federal Register — 5/10/83) Billy Creek, the northwest and northeast portions of Seven Blackfoot, Stafford, and the eastern portion of Antelope Creek are included in this document under that authority.

As a result of comment on the DEIS, a road was identified in the Burnt Lodge WSA. Investigation showed that the road had existed, but was not identified in the inventory. The road creates a 120-acre parcel of public land within sections 28 and 29 of T. 23 N., R. 33 E. The parcel is not contiguous to any public lands. The corrected acreage of the Burnt Lodge WSA is 13,730.

As noted in Chapter 2 of the DEIS, a 500-acre block identified as part of the Terry Badlands WSA during inventory is not contiguous to any other public land within the WSA. Only the other two roadless areas, which are east and west of the Calypso Trail, were considered in the alternatives of the DEIS. However, the maps and acreage did not show that this 500-acre block was not considered under any alternative. Therefore, the acreages and maps in this FEIS have been changed. It should be noted that the boundaries of the portion of the WSA recommended suitable in the proposed action of this FEIS are identical to those in the preferred alternative of the DEIS.

Since the public hearing associated with this DEIS, changes in ownership status for lands contiguous to some of the WSAs has occurred. Since these acquired lands were not subjected to the hearing process, they will not be considered in this document.

SETTING

The WSAs considered in this document are in the northern Great Plains in central and eastern Montana. The Dog Creek South, Woodhawk, Stafford, Ervin Ridge, Cow Creek, Antelope Creek and Burnt Lodge WSAs are in the BLM's Lewistown District, while Bridge Coulee, Musselshell Breaks, Seven Blackfoot, Billy Creek and Terry Badlands are in the Miles City District. There are a total of 170,080 acres of public lands in these 12 WSAs in Fergus, Blaine, Phillips, Valley, Garfield and Prairie Counties (see Figure 1.1).

All WSAs except the Terry Badlands are in the deeply eroded Missouri River Basin. The Bridge Coulee and Musselshell Breaks WSAs are situated along the Musselshell River, approximately 8 and 15 miles, respectively, from the confluence of the Musselshell and Missouri. The Terry Badlands is in the Yellowstone River drainage basin just north of Terry in eastern Montana.

Six of the WSAs — Dog Creek South, Woodhawk, Stafford, Ervin Ridge, Cow Creek and Antelope Creek — overlap the boundary of the Upper Missouri Wild and Scenic River. As such, each contains a portion of the Wild and Scenic River Management Corridor (Figure 1.1). The Burnt Lodge, Seven Blackfoot, Billy Creek and Antelope Creek WSAs are contiguous with wilderness study areas in the Charles M. Russell National Wildlife Refuge (Figure 1.1).

Lewistown, Chinook and Glasgow are the largest communities in counties with WSAs, while Malta, Jordan, Winifred and Terry are smaller centers of population. All of the WSAs are within 5 hours driving time of both Great Falls and Billings, the largest cities in Montana.

WILDERNESS REVIEW PROCESS

INVENTORY PHASE

In November 1978, BLM began the wilderness review by inventorying the public lands for areas that contained wilderness characteristics. The State Director released his final decision, which identified those areas that had the minimum characteristics of size, naturalness and outstanding opportunities for solitude and/or primitive recreation. The final decision for the Terry Badlands WSA was published in the Federal Register on June 16, 1979. The final decision for the other 11 WSAs was published in the Federal Register on November 14, 1980. The public was allowed to protest any of the final decisions.

Several protests were received and were upheld by the State Director, resulting in changes that were published in the Federal Register on February 25, 1981. Some individuals whose protests were denied made formal appeals to the U.S. Department of the Interior Board of Land Appeals (IBLA). All appeals have been resolved. (Federal Register, 11/18/82)

STUDY PHASE

The study phase involves the process of determining which WSAs will be recommended as suitable for wilderness designation and which will be recommended as nonsuitable by the Secretary. These decisions are made through the BLM's land use planning system and will be documented in the Wilderness Study Report (WSR). The WSR will be completed after the Secretary receives United States Geological Survey and Bureau of Mines minerals reports.

The 12 wilderness study areas are in seven BLM planning units, covered by five management framework plans (MFPs) and two transition MFPs. (Appendix 1.1) The MFP makes coordinated land use allocations for all resources and establishes objectives and constraints for each resource and the activities that support it. Conflicts between resources are reconciled through analysis and discussion, including public comment.

The five MFPs cover the area of 10 of the 12 WSAs. Each of the five MFPs contains more specific resource recommendations, decisions and trade-offs, based on particular resource conditions. These five MFPs were updated in 1977. Comments from the public were sought for the updated MFPs by public meetings and open house sessions held in late 1977 and early 1978. The five MFPs were all completed prior to the completion of wilderness inventory. They will be amended after the completion of the wilderness review process.

Transition MFPs are plans that were in progress on September 6, 1979, when the BLM's resource management plan process became effective. They follow the same process as MFPs. The Jordan-North Rosebud transition MFP includes the Musselshell Breaks WSA, while the New Prairie transition MFP contains the Terry Badlands WSA. These documents are completed through MFP Step 2. This step recommends inclusion of the Musselshell Breaks and Terry Badlands WSAs in the National Wilderness Preservation System, depending on the analysis in the study process. The final MFP Step 3 recommendation (either recommending wilderness designation or not) will be completed after the completion of the wilderness review process.

Bureau of Land Management Planning Regulations discuss MFP amendments. The regulations require that the amendment process use all the steps of the resource management planning process (43 CFR 1610.8 and 1610.5-5).

Hearings were held on the Draft Environmental Statement in June of 1982 in Jordan, Terry, Malta, Winifred, and Helena, Montana. Written comments were accepted until July 26, 1982.

REPORTING PHASE

The reporting phase begins when the BLM State Director forwards his preliminary wilderness recommendation to the BLM Director. The reporting process

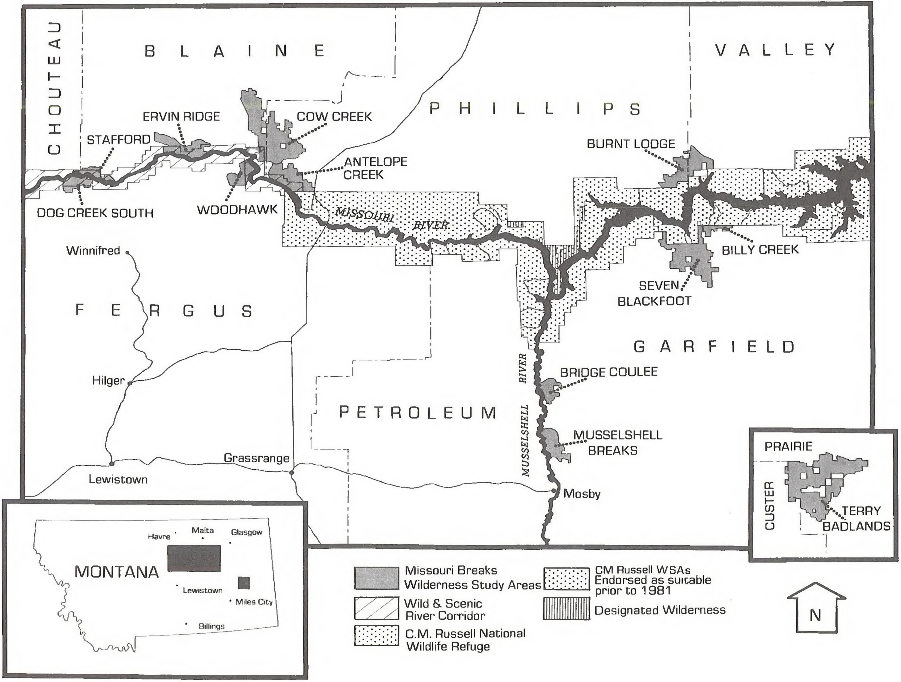

CHOUTEAU
BLAINE
VALLEY
PHILLIPS
ERVIN RIDGE
COW CREEK
STAFFORD
BURNT LODGE
ANTELOPE CREEK
DOG CREEK SOUTH
WOODHAWK
MISSOURI RIVER
BILLY CREEK
Winnifred
SEVEN BLACKFOOT
FERGUS
GARFIELD
BRIDGE COULEE
Hilger
MUSSELSHELL RIVER
PETROLEUM
MUSSELSHELL BREAKS
PRAIRIE
Grassrange
Lewistown
Mosby
CUSTER
TERRY BADLANDS
Havre
Malta
Glasgow
MONTANA
Lewistown
Miles City
Billings
Missouri Breaks Wilderness Study Areas
Wild & Scenic River Corridor
C.M. Russell National Wildlife Refuge
CM Russell WSAs Endorsed as suitable prior to 1981
Designated Wilderness
N

FIGURE 1.1 LOCATION MAP — MISSOURI BREAKS WILDERNESS STUDY AREA

requires the administrative review of the Director, the Secretary of Interior, and the President. Recommendations for all wilderness study areas studied under Section 603 of FLPMA must reach the President no later than October 21, 1991. The President will transmit his recommendation to Congress. Congress will take the recommendations submitted by the President along with other pertinent information, and after debate and counsel, will pass legislation that would formally designate WSAs as wilderness or release them for uses other than wilderness.

A wilderness management plan will be developed for those WSAs designated by Congress as Wilderness. Management of the WSAs designated a wilderness and the management plan will be consistent with the "Wilderness Management Policy (USDI-BLM 9/81), hereafter referred to as WMP.

Those WSAs released by Congress or, as appropriate, by the Secretary, will be managed without consideration of the BLM's Wilderness Interim Policy and guidelines for Lands under Wilderness Review.

SCOPING (ISSUE IDENTIFICATION)

An issue identification letter was sent to the public on May 21, 1981. In addition, several open houses were held (See Appendix 1.2). On the basis of responses from the public and consideration by BLM staff, the following issues were identified for analysis or eliminated from detailed study. The discussion that follows is specific to each WSA. For each WSA, the issues are divided into two groups: those that are labelled significant, which will be analyzed further in the remaining chapters of the document and; those labelled insignificant, which will be analyzed briefly in Chapter 1.

DOG CREEK SOUTH — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

DOG CREEK SOUTH — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated as wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine Counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There are two pockets, totalling less than 5 acres, of light density knapweed/leafy spurge in the WSA. Control by integrated methods, which may include chemicals, will occur, subject to fiscal and legal constraints, when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 5.75 miles of vehicle way constituting 3 acres. Approximately 6.6

acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 3.2 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 3.4 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action, the erosion rate is expected to remain above the normal geologic rate as a result of projected activitied. Compared to the geologic rate of 25 tons/acre/year under the wilderness alternative, the additional erosion from projected surface disturbance on 0.2 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

STAFFORD — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

STAFFORD — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated as wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine Counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be limited to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There are six pockets, totalling less than 4 acres, of light density knapweed, spurge, or Canadian thistle in the WSA. Control by integrated methods, which may include chemicals, will occur, subject to fiscal and legal constraints, when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 3.5 miles of vehicle way constituting 2 acres. Approximately 4.9 acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 3.2 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 1.7 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate of 12 tons/acre/year under the wilderness alternative, the additional erosion from projected surface disturbance on 0.1 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

ERVIN RIDGE — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Project Maintenance Levels
Impacts on Recreational ORV Use Levels

ERVIN RIDGE — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine Counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area or to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There are three pockets, totalling 2 acres, of light density knapweed in the WSA. Control by integrated methods, which may include chemicals, will occur, subject to fiscal and legal constraints, when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 5.35 miles of vehicle way constituting 3 acres. Approximately 34 acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 14 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 20 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate of 10 tons/acre/year under the wilderness alternative, the additional erosion from projected surface disturbance on 0.4 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

WOODHAWK — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

WOODHAWK — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated as wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be doirected to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There are two pockets, totalling approximately 1 acre, of light density leafy spurge/knapweed in the WSA. Control by integrated methods, which may include chemicals, will occur, subject to fiscal and legal constraints, when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 1.75 miles of vehicle way constituting 3 acres. Approximately 15.4 acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 5.2 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 10.2 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate of 6 tons/acre/year under the wilderness alternative, the additional erosion from projected surface disturbance on 0.2 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

COW CREEK — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Construction of New Range Improvements
Impacts on Recreational ORV Use Levels

COW CREEK — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. One site, the Keaster site, is recorded for the WSA. It is an excellent example of a bison kill and processing site, dating to 240 B.C. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine Counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no officially recognized threatened and endangered (T&E) plant species in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area, and their use of the area is transitory. There is no resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area so long as there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 24.25 miles of vehicle way constituting 13 acres. As much as 297 acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 110 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 187 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action of partial wilderness, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate of 8 tons/acre/year under the all wilderness alternative, the additional erosion from projected surface disturbance on 2 percent of the WSA is insignificant. There will be minor effects on resource values, such as the Missouri River fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

ANTELOPE CREEK — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Oil and Gas Development Levels
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

ANTELOPE CREEK — INSIGNIFICANT ISSUES

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduced levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated as wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. A field inventory (sampling type) in Fergus County and in parts of south Phillips and Blaine Counties suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There are two pockets, totalling approximately 2 acres, of light density knapweed in the WSA. Control by integrated methods, which may include chemicals, will occur, subject to fiscal and legal constraints, when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 11 miles of vehicle way constituting 6 acres. As much as 30.6 acres would be disturbed due to projected gas well development on the benches and ridges of the WSA. Reclamation actions on 13.6 acres would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. The remaining 17 acres of projected roads would generally be on ridges that will be closed within 15 years. Under the proposed action of partial wilderness, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate of 7 tons/acre/year under the all wilderness alternative, the additional erosion from projected surface disturbance on 0.3 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

BRIDGE COULEE — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

BRIDGE COULEE — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as low for oil and moderate for gas potential. The WSA is 10 miles north of the structure which forms the Cat Creek oil field. The Cat Creek field is one of the oldest in the state and dates from 1920. The field has been well defined by historic drilling within and around the field. The field is not expanding and production is declining through time.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately one percent (53 acres) of the WSA has been field inventoried for historic or prehistoric sites. Two sites are recorded for the WSA. Field inventories of the surrounding areas (Musselshell Planning Unit) suggest 0.12 to 0.8 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species-: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 3 miles of vehicle way constituting 2 acres. Under the proposed action, the erosion rate is expected to remain above the normal geologic rate of 8 tons/acre/year as a result of projected ORV activities. Compared to the geologic rate under the wilderness alternative, the additional erosion from projected surface disturbance on 0.05 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

MUSSELSHELL BREAKS — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Construction of New Range Improvements
Impacts on Recreational ORV Use Levels

MUSSELSHELL BREAKS — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as moderate for oil and moderate for gas potential. The WSA is 2 miles north of the structure which forms the Cat Creek oil field. The Cat Creek field is one of the oldest in the state and dates from 1920. The field has been well defined by historic drilling within and around the field. The field is not expanding and production is declining through time.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Cultural and Historic Values: None of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. Field inventories of the surrounding areas (Musselshell Planning Unit) suggest 0.12 to 0.8 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 7.5 miles of vehicle way constituting 4 acres. Under the proposed action, the erosion rate is expected to remain above the normal geologic of 7 tons/acre/year rate as a result of projected ORV activities. Compared to the geologic under the wilderness alternative, the additional erosion from projected surface disturbance on 0.05 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

BILLY CREEK — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

BILLY CREEK — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as low for oil and moderate for gas potential. Historical drilling in surrounding townships, while not extensive, has been unsuccessful.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated as wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately 37 percent (1,280 acres) of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. Field inventories of the surrounding areas (Musselshell Planning Unit) suggest 0.12 to 0.8 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 1.25 miles of vehicle way constituting 1 acre. Under the proposed action, the erosion rate is expected to remain above the normal geologic as a result of projected ORV activities. Compared to the geologic of 8 tons/acre/year rate under the wilderness alternative, the additional erosion from projected surface disturbance on 0.4 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

SEVEN BLACKFOOT — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Construction of New Range Improvements
Impacts on Recreational ORV Use Levels

SEVEN BLACKFOOT — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as low for oil and moderate for gas potential. Historical drilling in surrounding townships, while not extensive, has been unsuccessful.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Cultural and Historic Values: Approximately six percent (1,316 acres) of the WSA has been field inventoried for historic or prehistoric sites. One site is recorded for the WSA. Field inventories of the surrounding areas (Musselshell Planning Unit) suggest 0.12 to 0.8 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area or to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer. Therefore, density and composition of wildlife, except mule deer, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 11.25 miles of vehicle way constituting 5 acres. Under the proposed action of partial wilderness, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic of 6 tons/acre/year rate under the all wilderness alternative, the additional erosion from projected surface disturbance on 0.02 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area even under nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

BURNT LODGE — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer, Elk
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels

BURNT LODGE — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as low for oil and moderate for gas potential. Historical drilling in surrounding townships, while not extensive, has been unsuccessful.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately five percent of the WSA has been field inventoried for historic or prehistoric sites. No sites are recorded for the WSA. Field inventories of the surrounding areas suggest 0.35 to 2.30 sites per section (640 acres) may occur. Actions projected for the proposal are not expected to impact the few sites that exist because of the relative scarcity of the sites and because of surface disturbance precautions.

Impacts on Threatened and Endangered Species: There are no federally listed recognized threatened and endangered (T&E) animal or plant species residing in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area and their use of the area is transitory. There is no permanent resident population in the WSA.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. No vegetative species conversion or other changes in wildlife habitat are proposed with or without wilderness designation. No wildlife species is hunted, except mule deer and elk. Therefore, density and composition of wildlife, except mule deer and elk, are not an issue for more detailed analysis.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 13.6 miles of vehicle way constituting 7 acres. Under the proposed action of all wilderness, the erosion rate is expected to return to the normal geologic rate of 8 tons/acre/year as a result of projected activities. Compared to the geologic rate under the nonwilderness alternative, the additional erosion from projected surface disturbance on 0.05 percent of the WSA is insignificant. There will be no effect on resource values, such as fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

TERRY BADLANDS — SIGNIFICANT ISSUES

Impacts on Wilderness Values
Impacts on Big Game Population Levels — Mule Deer
Impacts on Livestock Management and Existing Range Project Maintenance Levels
Impacts on Recreational ORV Use Levels
Impacts on Coal Mining Levels

TERRY BADLANDS — INSIGNIFICANT ISSUES

Impacts on Oil and Gas Development Levels: Concerns were expressed that opportunities to produce oil and gas in areas of high potential would be eliminated or reduced. The U.S. Geological Survey rated the area as low for oil and low for gas potential. Historical drilling in surrounding townships, while not extensive, has been unsuccessful.

Impacts on Levels of Grazing Permitted: Concerns were raised that wilderness designation would cause prohibitions in grazing or reduce the levels of grazing permitted. Under the "Wilderness Management Policy" (WMP), there shall be no curtailments in grazing simply because an area is wilderness. No changes in grazing levels are proposed in planning documents. Therefore, no reductions (or adjustments) are projected in levels of livestock grazing with or without wilderness designation.

Impacts on Construction of New Range Projects: Concerns were raised that no new water sources or other range improvements would be permitted in the area, if designated wilderness. No projects are proposed in the area, regardless of wilderness designation.

Impacts on Cultural and Historic Values: Approximately 15 percent (6,720 acres) of the WSA has been field inventoried for historic or prehistoric sites. Fifteen sites, all lithic scatters, are recorded for the WSA. The field inventory indicated a moderate site density of 1.4 sites per section (640 acres). All actions, except coal mining, projected for the proposal are not expected to impact the few sites that exist because of their relative scarcity and because of surface disturbance precautions. The mining area, prior to coal mining, must be completely inventoried for cultural resources. Nine of the 15 recorded lithic scatters within the WSA are within the mining area. Approximately 41 percent of the PRLA acreage within the WSA has been inventoried. Any sites determined to be eligible for nomination to the National Register of Historic Places (NRHP) would be mitigated. Mitigation entails excavating the site, salvaging items, and recording the information contained in the site. The remaining sites, which would not be eligible for the NRHP, would be obliterated by mining. Due to the low research and rarity value of the noneligible sites, this is not an issue for analysis.

Impacts on Threatened and Endangered Species: There are no officially recognized threatened and endangered (T&E) plant species in the WSA. Wintering bald eagles are the only T&E animal species which may occur in the study area. There is no resident population in the WSA. During the early 1900's, peregrine falcons are reported to have bred 2 miles east of the WSA. However, they were reported to be scarce (Cameron 1907). Subsequent field investigations in 1979, 1980, and 1985 found no evidence of aeries. Furthermore, habitat was judged to be suboptimal. A peregrine falcon was sighted 3 miles southwest of the WSA in May 1979. It almost certainly was a migrant bird.

Impacts on Fire Control: Concerns were raised that fires would be left to burn or that fire fighting techniques would not be effective in controlling the spread of fires to adjacent private land. Under the WMP, fire suppression actions will be directed to prevent loss of human life or property within the area and to prevent the spread of fire to areas outside where life, resources, or property may be threatened.

Impacts on Control of Noxious Weeds: Concerns were expressed that there would be no control of noxious weeds. There have been no noxious weeds reported in the area nor is it anticipated that significant levels will be found in the near future. However, control by integrated methods, which may include chemicals, will occur when noxious farm weeds threaten lands outside the area or are spreading within the area if there are no serious adverse effects on wilderness values. This is consistent with the WMP.

Impacts on Wildlife: Concerns were raised that wilderness designation would change the population density and composition of wildlife. Under the proposed action (partial wilderness alternative 2) coal mining is projected to occur. Two hundred seventy-five (275) acres would be disturbed annually. This habitat, primarily sagebrush-grassland/gumbo, would be reclaimed within 10 years. There are no raptor nests, leks (see glossary), or wintering areas identified in the PRLAs. There are 500 acres of prairie dog towns outside of the WSA, but within the area projected to be mined. Small mammals and birds inhabit the entire area. Under the proposed action, the prairie dog towns would be destroyed. The acreage of vegetative species conversion is large enough to reduce the population density of only small birds and animals. Under the all wilderness alternative, the small bird and mammal population level would be retained. Impacts are expected to be insignificant.

Impacts on Predator Control: Concerns were raised that in areas designated wilderness there would be no control of predators (coyotes), which would then spread to adjacent lands. Currently, snares, traps, shooting from the ground or air and spring-loaded cyanide guns (M-44s) are used depending on the circumstances. Under wilderness designation, the WMP prohibits only M-44s.

Impacts on Erosion and Water Quality Levels: Concerns were raised that continued use by ORVs or projected development would increase erosion and degrade water quality. Currently, ORV use occurs on 23 miles of vehicle way constituting 12 acres. Approximately 275 acres would be disturbed annually due to projected coal development. Reclamation actions would occur in one season and erosion levels would decline to at least current levels within five seasons, due to successful revegetation. Under the proposed action of partial wilderness, the erosion rate is expected to remain above the normal geologic rate as a result of projected activities. Compared to the geologic rate under the all wilderness alternative, the additional erosion from projected surface disturbance of 3 percent of the WSA is insignificant. There will be no effect on resource values, such as the Yellowstone River fisheries. Consequently, soil erosion and water quality levels are not an issue for more detailed analysis.

Impacts on Timber Harvest: Concerns were expressed that commercial forest land would not be available for harvest. No sales of commercial forest products have occurred or are anticipated in the area, under designation or nondesignation. Extensive timber inventory indicates that very little forested land would meet the minimum growth capability of commercial forest land. That which might is very scattered and would not be managed as commercial forest land due to other resource values.

TWO

PROPOSED ACTIONS AND ALTERNATIVES

DEVELOPMENT OF ALTERNATIVES

Chapter 2 describes the proposed action and a reasonable range of alternatives considered for the Missouri Breaks Wilderness Study EIS.

Two alternatives are considered for each WSA. The No Wilderness Alternative (No Action) which analyzes the effects of not designating any part of each Wilderness Study Area (WSA) as suitable for wilderness. The All Wilderness Alternative analyzes the effects of designating each WSA as suitable for wilderness designation.

In addition to the two mentioned alternatives, one or more partial wilderness alternatives are considered for some WSAs. Partial wilderness alternatives allow portions of a WSA to be recommended either suitable or nonsuitable. Two guidelines were used to arrive at the partial wilderness alternatives: (1) to resolve conflicts between wilderness and other resource uses and (2) to improve the long-term wilderness manageability of the units.

Resource conflicts would arise when other uses reduce opportunities for solitude or primitive recreation or impair natural values. The manageability of a study area is affected by locations and types of inholdings, valid existing rights, presence of cherry-stemmed or other segmenting roads, presence of identifiable boundaries, the potential to remove unneeded manmade features and the type of location of outside influences.

Eight of the WSAs are composed of one roadless area. Four areas — Antelope Creek, Seven Blackfoot, Billy Creek and Terry Badlands — are composed of two or more roadless areas. Legal descriptions of the WSAs are in Appendix 2.1. Several other alternatives, discussed below, were eliminated from detailed study since they either did not meet the criterion of improving manageability or did not eliminate potential resource conflicts.

Six WSAs contain lands within the Upper Missouri Wild and Scenic River Management Corridor. Partial wilderness alternatives recommending just these lands as suitable for wilderness were considered. These partial wilderness alternatives would have significantly reduced the size of these WSAs to a point too small to be effectively managed as wilderness. Of these areas, only Ervin Ridge has over 5,000 acres within the management corridor. In several of the WSAs there are public lands outside the river corridor which are necessary to form manageable boundaries, provide access and create an area large enough to ensure opportunities for solitude and primitive recreation. The river management corridor was designated for multiple use. There are no provisions in BLM's Upper Missouri Wild and Scenic River Management Plan to manage the corridor as wilderness. Resource uses which could conflict with wilderness, such as motor vehicle use, are allowed.

Grouping WSAs into some logical block for analysis was considered. The potential advantage from grouping would be the consideration of a larger block of land of similar physiographic characteristics. These combinations were considered: Dog Creek South and Stafford; Cow Creek, Antelope Creek, and Woodhawk; and Seven Blackfoot and Billy Creek. These WSAs are separated from others in their groups by state land (the Missouri Riverbed), private land and roads. No resource conflicts would be eliminated through the grouping of the units and manageability would be more difficult with the ownership conflicts.

DOG CREEK SOUTH — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 5,150 acres of Dog Creek South WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Fergus MFP. Management on 3,902 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. (Figure 2.1)

Oil and Gas Development Actions

Approximately 1,801 acres within the "wild" UMWSR portion of the WSA are withdrawn from activities associated with mineral leasing. Development activities associated with mineral leases on the remaining 2,101 acres within the UMWSR corridor which are classed as "recreation," would be restricted.

The most likely scenario, based on UMWSR factors and historic activity in the Leroy gas field 3 miles to the northeast, is that two gas wells would be drilled in the 1,248 acres in the WSA that are outside of the UMWSR corridor. A one acre pad would be cleared at each of the two well sites. Two miles of road involving 3.4 acres would be constructed within the WSA. One of the wells would be successful and the other a dry hole. One mile of underground gas lines, involving 1.2 acres, would be installed from the successful well to pumping and storage facilities outside of the WSA. The 3.2 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful well.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from May through October along 5.75 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are four reservoirs and two fences totalling 1.5 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance of 4.5 miles involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 150 recreation visitor days (RVDs) annually. This includes approximately five RVDs of vehicle dependent visits. These levels of use are expected to continue. There are no projected increases.

DOG CREEK SOUTH — ALL WILDERNESS ALTERNATIVE

All 5,150 acres of the Dog Creek South WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

Although the entire 5,150 acres would be withdrawn from mineral leasing, including 3,902 acres within the UMWSR corridor, the most likely scenario projects two wells that would not be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there was no practical alternative. Maintenance of each of the four reservoirs would be done with heavy equipment once every 20 years.

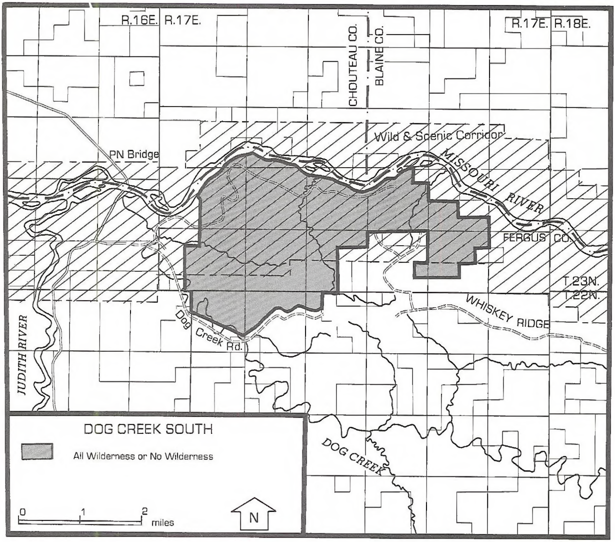
Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

STAFFORD — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE

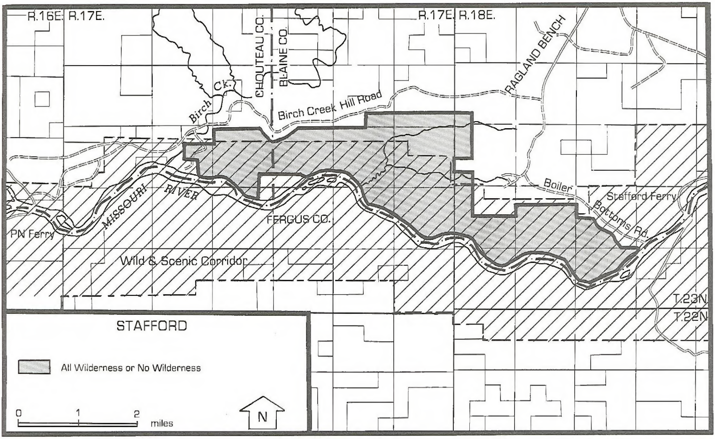
None of the 4,800 acres of Stafford WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the South Bearpaw MFP. Management on 4,346 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. (Figure 2.2)

FIGURE 2.1 DOG CREEK SOUTH (MT-024-633) ALTERNATIVES MAP


R.16E.
R.17E.
R.17E.
R.18E.
CHOUTEAU CO.
BLAINE CO.
Wild & Scenic Corridor
PN Bridge
MISSOURI RIVER
FERGUS CO.
T.23N.
T.22N.
WHISKEY RIDGE
Dog Creek Rd.
JUDITH RIVER
DOG CREEK
DOG CREEK SOUTH
▨ All Wilderness or No Wilderness
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

FIGURE 2.2 STAFFORD (MT-066-250) ALTERNATIVES MAP


R.16E.
R.17E.
R.17E.
R.18E.
CHOUTEAU CO.
BLAINE CO.
RAGLAND BENCH
Birch Ck.
Birch Creek Hill Road
Boiler
Stafford Ferry
Bottoms Rd.
MISSOURI RIVER
FERGUS CO.
PN Ferry
Wild & Scenic Corridor
T.23N.
T.22N.
STAFFORD
All Wilderness or No Wilderness
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

Oil and Gas Development Actions

Approximately 3,808 acres within the "wild" UMWSR portion of the WSA are withdrawn from activities associated with mineral leasing. Development activities associated with mineral leases on the remaining 538 acres within the UMWSR corridor which are classed "scenic" or "recreation," would be restricted.

The most likely scenario, based on UMWSR factors and historic activity in the Leroy gas field immediately to the northeast, is that two gas wells would be drilled in the 454 acres in the WSA that are outside of the UMWSR corridor. A one acre pad would be cleared at each of the two well sites. One mile of road involving 1.7 acres would be constructed within the WSA. One of the wells would be successful and the other a dry hole. One mile of underground gas line, involving 1.2 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 3.2 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from mid-April through mid-December along 3.5 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are one reservoir and five fences totalling 5 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. Approximately 4.5 miles of the existing fence is along the boundary of the area and so would normally be maintained without bringing a motorized vehicle into the area. The remaining 0.5 mile would be maintained using a motorized vehicle. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 75 recreation visitor days (RVDs) annually. This includes approximately five RVDs of vehicle dependent visits. These levels of use are expected to continue.

STAFFORD — ALL WILDERNESS ALTERNATIVE

All 4,800 acres of the Stafford WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

The entire 4,800 acres would be withdrawn from mineral leasing. This withdrawal would include 4,346 acres within the UMWSR corridor.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation is that no wells would be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there was no practical alternative. Maintenance of the one reservoir would be done with heavy equipment once every 20 years.

The 5.0 miles of existing fence would be maintained without the use of a motorized vehicle.

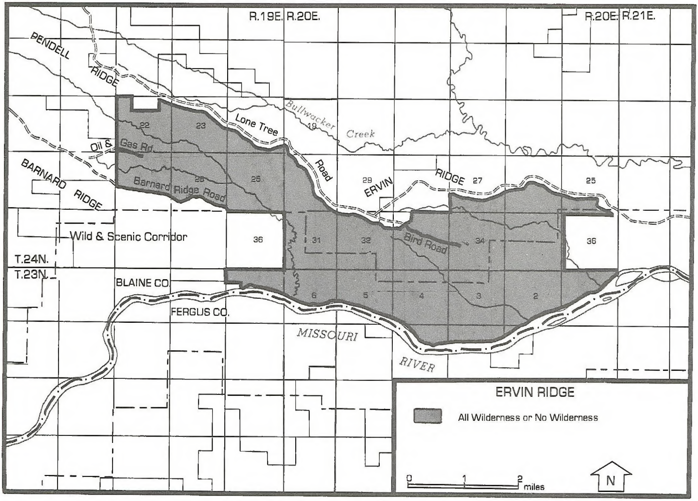
Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

ERVIN RIDGE — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 10,200 acres of Ervin Ridge WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the South Bearpaw MFP. Management on 5,061 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. (Figure 2.3)

FIGURE 2.3 ERVIN RIDGE (MT-066-253) ALTERNATIVES MAP


R.19E. R.20E.
R.20E. R.21E.
PENDELL RIDGE
Lone Tree Road
Bullwacker Creek
Oil & Gas Rd.
BARNARD RIDGE
Barnard Ridge Road
ERVIN RIDGE
Bird Road
Wild & Scenic Corridor
T.24N.
T.23N.
BLAINE CO.
FERGUS CO.
MISSOURI RIVER
22
23
19
25
26
29
27
25
36
31
32
34
36
6
5
4
3
2
ERVIN RIDGE
All Wilderness or No Wilderness
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

Oil and Gas Development Actions

The entire 5,061 acres within the UMWSR portion of the WSA are "wild" and are withdrawn from activities associated with mineral leasing. However, 280 acres of this "wild" portion contains a pre-FLPMA lease which is held by the production of wells outside of the WSA. Lease No. M-13818 overlaps the UMWSR in T. 24 N., R. 20 E., Sec. 31. However, it is unlikely that pre-FLPMA lease rights will be exercised by drilling in these 280 acres. There is a steep drainage (Williamson Coulee) that runs through the middle of the 280 acres, which would probably make such exploration prohibitively expensive. Furthermore, such drilling would conflict with resource values of the UMWSR. For these two reasons, the scenario discussed below does not project exploration actions on the 280 acres with pre-FLPMA leases within the UMWSR.

The most likely scenario, based on UMWSR factors and historic activity in the Leroy gas field 3 miles to the northeast, is that eight gas wells would be drilled in the 5,139 acres in the WSA that are outside of the UMWSR corridor. A one-acre pad would be cleared at each of the eight well sites. The pads would generally be south of and a mile from the north or west boundary of the WSA. Twelve miles of road involving 20.4 acres would be constructed within the WSA. Three of the wells would be successful and the other five would be dry holes. Five miles of underground gas lines, involving 6 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 14 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example inspect fence and distribute salt. This occurs on an average of once weekly from May through October along 5.35 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 12 reservoirs and two fences totalling 2.75 miles. The majority of maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Maintenance of 2.75 miles of existing and 1 mile of projected involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Construction of New Range Improvement Actions

A fence approximately 1 mile in length will be built along the north boundary.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 100 recreation visitor days (RVDs) annually. This includes approximately two RVDs of vehicle dependent visits. These levels of use are expected to continue.

ERVIN RIDGE — ALL WILDERNESS ALTERNATIVE

All 10,200 acres of the Ervin Ridge WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease. Livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

The entire 10,200 acres would be withdrawn from mineral leasing. This withdrawal would include 5,061 acres already withdrawn within the UMWSR corridor. Within the WSA are approximately 1,740 acres of pre-FLPMA leases. They are concentrated in the westernmost portion and the north central portion of the WSA.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects and 1 mile of projected fence would be maintained using motorized equipment only when there is no practical alternative. Maintenance of each of the 12 reservoirs would be done with heavy equipment once every 20 years.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

WOODHAWK — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 8,100 acres of Woodhawk WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Fergus MFP. Management on 3,477 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. (Figure 2.4)

Oil and Gas Development Actions

Approximately 1,937 acres within the "wild" UMWSR portion of the WSA are withdrawn from activities associated with mineral leasing. Development activities associated with mineral leases on the remaining 1,540 acres within the UMWSR corridor which are classed "scenic" would be restricted.

The most likely scenario, based on UMWSR factors and historic activity in the Leroy gas field 8 miles to the west, is that four gas wells would be drilled in the 4,623 acres in the WSA that are outside of the UMWSR corridor. A one-acre pad would be cleared at each of the four well sites. Six miles of road involving 10.2 acres would be constructed within the WSA. One of the wells would be successful and the other three would be dry holes. One mile of underground gas lines, involving 1.2 acres, would be installed from the well to pumping and storage facilities outside of the WSA. The 5.2 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful well.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from May through October along 1.75 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 12 reservoirs and 3.5 miles of fence. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at 400 recreation visitor days (RVDs) annually. This includes approximately 10 RVDs of vehicle dependent visits. These levels of use are expected to continue.

WOODHAWK — ALL WILDERNESS ALTERNATIVE

All 8,100 acres of the Woodhawk WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

The entire 8,100 acres would be withdrawn from mineral leasing. This withdrawal would include 3,477 acres within the UMWSR corridor.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of each of the 12 reservoirs would be done with heavy equipment once every 20 years.

The 3.5 miles of fence would be maintained without the use of a motorized vehicle.

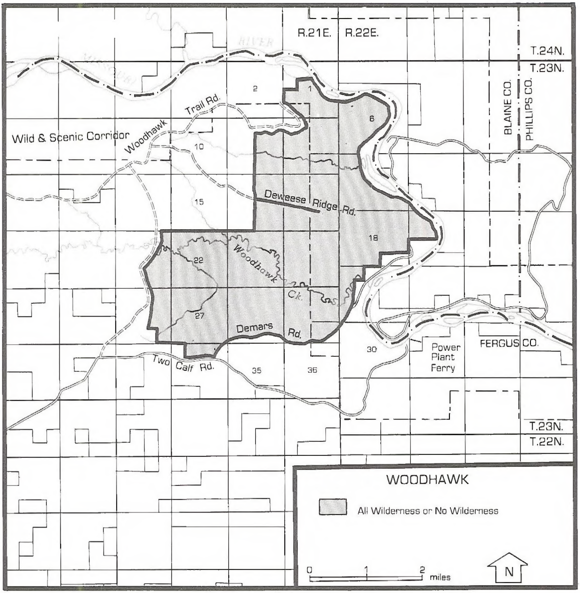
Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

COW CREEK — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE)

Approximately 21,590 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would

FIGURE 2.4 WOODHAWK (MT-068-246) ALTERNATIVES MAP


R.21E.
R.22E.
RIVER
MISSOURI
T.24N.
T.23N.
BLAINE CO.
PHILLIPS CO.
2
1
6
Trail Rd.
Woodhawk
Wild & Scenic Corridor
10
15
Deweese Ridge Rd.
18
22
Woodhawk Ck.
27
Demars Rd.
30
Power Plant Ferry
FERGUS CO.
Two Calf Rd.
35
36
T.23N.
T.22N.
WOODHAWK
All Wilderness or No Wilderness
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The 21,590 acres would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Of the remaining 12,460 acres of the WSA, none would be recommended as suitable. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Management on 2,018 acres would be consistent with UMWSR designation and associated plans. (Figure 2.5)

Oil and Gas Development Actions

In the portion recommended as suitable for wilderness designation, the entire 21,590 acres would be withdrawn from mineral leasing. This withdrawal would include 1,358 acres within the UMWSR corridor.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Of the 12,460 acres recommended as nonsuitable, 660 acres is within the UMWSR corridor. These 660 acres are within the "wild" UMWSR portion of the WSA and are withdrawn from activities associated with mineral leasing. The four portions of the WSA recommended as nonsuitable are approximately 10 miles east of the Leroy gas field. One wildcat well of five that have been drilled produced a "show" (see Glossary).

The most likely scenario, based on UMWSR factors and historic activity in and around the area, is that 18 gas wells would be drilled in the 11,800 acres in the nonsuitable portion of the WSA that are outside of the UMWSR corridor. A one-acre pad would be cleared at each of the 18 well sites. Four of the wells would be successful and 14 of the wells would be dry holes. Forty miles of road involving 68 acres would be constructed within the WSA. Twenty (20) miles of underground gas lines, involving 24 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 42 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population of mule deer in either the 21,590 acres recommended as suitable or the 12,460 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 21,590 acres recommended as suitable, livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing and planned range projects would be maintained using motorized equipment only when there is no practical alternative. Existing range projects include 10 water developments and 13 miles of fence.

The 13 miles of existing fence would be maintained without the use of a motorized vehicle.

Maintenance for each of the 10 water developments would be done with heavy equipment once every 20 years.

For the 12,460 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly throughout most of the year along 8 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 16 water development and 4.5 miles of fence. All maintenance activities are performed by the operator under cooperative agreements. Reservoir and dam maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the 19 water developments (16 existing and three projected) would occur every 20 years. Fence maintenance of 4.5 miles of existing fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Construction of New Range Improvement Actions

For the 21,590 acres recommended as suitable, no new projects would be constructed.

In the remaining 12,460 acres recommended as nonsuitable, three new water developments would be constructed.

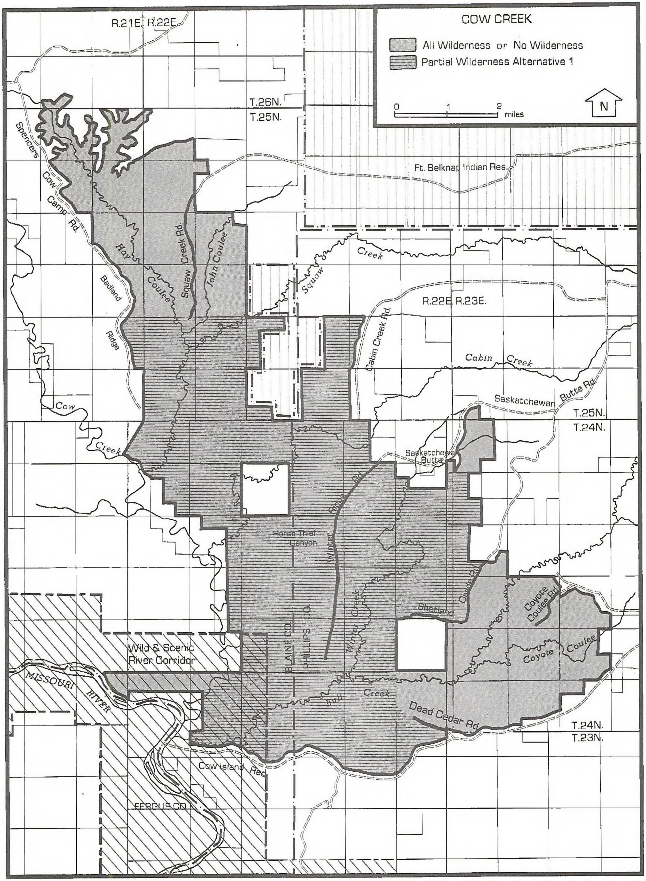
Recreational ORV Use Actions

On the 21,590 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 12,460 acres recommended as nonsuitable, recreational ORV use would continue at 200 RVDs annually.

COW CREEK — NO WILDERNESS/ NO ACTION ALTERNATIVE

None of the 34,050 acres of Cow Creek WSA would be recommended as suitable for wilderness. Management would be in compliance with the South Bearpaw MFP. Management on 2,018 acres would be consistent with UMWSR designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources, or timber harvest.

FIGURE 2.5 COW CREEK (MT-066-256) ALTERNATIVES MAP


COW CREEK
All Wilderness or No Wilderness
Partial Wilderness Alternative 1
0
1
2
miles
N
R.21E.
R.22E.
T.26N.
T.25N.
Ft. Belknap Indian Res.
Spencers
Cow
Camp
Rd.
Hay
Coulee
Squaw Creek Rd.
John Coulee
Badland
Ridge
Squaw
Creek
R.22E.
R.23E.
Cabin Creek Rd.
Cabin
Creek
Saskatchewan
Butte Rd.
T.25N.
T.24N.
Cow
Creek
Saskatchewan
Butte
Horse Thief
Canyon
Winter
Ridge
Rd.
Winter
Creek
Shetland
Divide Rd.
Coyote
Coulee Rd.
Coyote
Coulee
BLAINE CO.
PHILLIPS CO.
Wild & Scenic
River Corridor
MISSOURI
RIVER
Bull
Creek
Dead Cedar Rd.
T.24N.
T.23N.
Cow Island Rd.
FERGUS CO.

PROPOSED ACTION — Partial Wilderness Alternative 1

Oil and Gas Development Actions

Approximately 2,018 acres within the "wild" UMWSR portion of the WSA are withdrawn from activities associated with mineral leasing.

The WSA is 10 miles east of the Leroy gas field. One wildcat well of seven that have been drilled in the WSA produced a "show." The most likely scenario, based on UMWSR factors and historic activity in and around the area, is that 50 gas wells would be drilled in the 32,032 acres within the WSA and outside of the UMWSR corridor. A one-acre pad would be cleared at each of the 50 well sites. Ten of the wells would be successful and 40 would be dry holes. One hundred ten (110) miles of road involving 187 acres would be constructed within the WSA. Fifty (50) miles of underground gas lines, involving 60 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 110 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years or the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, to inspect fence and distribute salt. This occurs on an average of once weekly from May through October along 24.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 26 water development and 17.5 miles of fence. All maintenance activities are performed by the operators under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the existing 26 water developments and the three protected water developments would occur every 20 years. The schedule would be approximately two each year. Fence maintenance of 17.5 miles of existing fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Construction of New Range Improvement Actions

Three new water developments, generally reservoirs, would be built using mechanized equipment.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 450 recreation visitor days (RVDs) annually. This includes approximately 15 RVDs of vehicle dependent visits. These levels of use are expected to continue.

COW CREEK — ALL WILDERNESS ALTERNATIVE

All 34,050 acres of the Cow Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

The entire 34,050 acres would be withdrawn from mineral leasing. This withdrawal would include 2,018 acres within the UMWSR corridor.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there was no practical alternative.

Maintenance of each of the existing 26 water developments and the three projected water developments would occur every 20 years. Maintenance of the 17.5 miles of existing fence would be done without motorized vehicle.

Construction of New Range Improvement Actions

Three new water developments, generally reservoirs, would be built using mechanized equipment.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

ANTELOPE CREEK — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE 1)

Approximately 9,600 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Management of 4,373 acres of lands classed as "scenic" would be consistent with UMWSR designation and associated plans. (Figure 2.6)

Of the remaining 2,750 acres of the WSA, none would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Phillips MFP. None of this acreage is in the Upper Missouri Wild and Scenic River (UMWSR). No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Oil and Gas Development Actions

In the portion recommended as suitable for wilderness designation, the entire 9,600 acres would be withdrawn from mineral leasing. This withdrawal would include 4,373 acres within the UMWSR corridor.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Of the 2,750 acres recommended as nonsuitable, none are within the UMWSR corridor. The portion of the WSA recommended as nonsuitable is approximately 25 miles east of the Leroy gas field.

The most likely scenario, based on historic activity in and around the area, is that four gas wells would be drilled in the 2,750 acres. A one-acre pad would be cleared at each of the four well sites. Two miles of road involving 3.4 acres would be constructed within the WSA. One of the wells would be successful and three of the wells would be dry holes. One mile of underground gas lines, involving 1.2 acres, would be installed from the well to pumping and storage facilities outside of the WSA. The 5.2 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 9,600 acres recommended as suitable or the 2,750 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 9,600 acres recommended as suitable, livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Existing range projects include one reservoir. Maintenance for the reservoir would be done with heavy equipment once every 20 years. One mile of electric fence serves as an exclosure. It is maintained by the BLM using nonmotorized access.

For the 2,750 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, distribute salt. This occurs on an average of once weekly throughout May through December along 1.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing project is a water well. The majority of activities are performed by the operator under cooperative agreements. Water well maintenance involves the use of heavy equipment every 20 years.

Recreational ORV Use Actions

On the 9,600 acres recommended as suitable, recreational ORV use would be prohibited by, for example signing along the boundary, distribution of maps, and monitoring. On the 2,750 acres recommended as nonsuitable, recreational ORV use would continue at 50 RVDs, including two RVDs of vehicle-dependent use, annually.

ANTELOPE CREEK — NO WILDERNESS/NO ACTION ALTERNATIVE

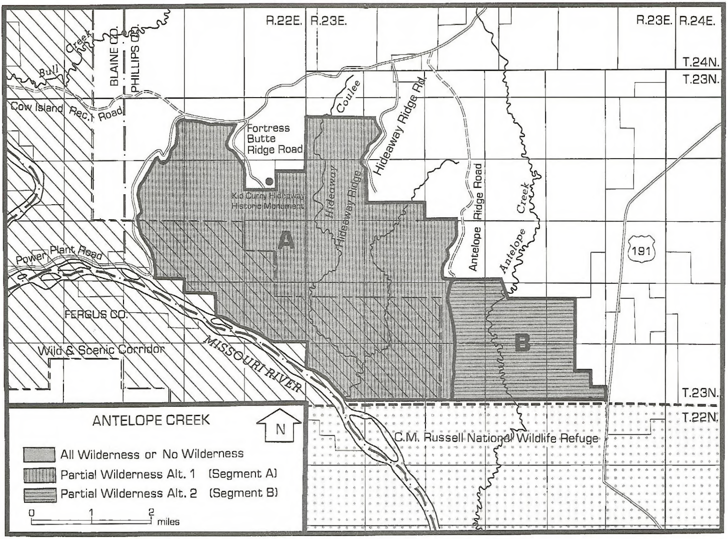
None of the 12,350 acres of the Antelope Creek WSA would be recommended as suitable for wilderness. Management would be in compliance with the Phillips MFP. Management of 4,373 acres would be consistent with Upper Missouri Wild and Scenic River (UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Oil and Gas Development Actions

None of the 4,373 acres within the UMWSR portion of the WSA are withdrawn from activities associated with mineral leasing as they are classed "scenic." Exploration and development activities associated with mineral leases on this acreage within the UMWSR corridor would be restricted.

The most likely scenario, based on UMWSR factors and historic activity in the Leroy gas field 25 miles to the northwest, is that 12 gas wells would be drilled in the 7,977 acres outside of the UMWSR corridor. A one-acre pad would be cleared at each of the 12 well sites. Ten miles of road involving 17 acres would be constructed within the WSA. Three of the wells would be successful and nine would be dry holes. Three miles of

FIGURE 2.6 ANTELOPE CREEK (MT-065-266) ALTERNATIVES MAP


R.22E.
R.23E.
R.23E.
R.24E.
T.24N.
T.23N.
T.23N.
T.22N.
Bull Creek
BLAINE CO.
PHILLIPS CO.
Cow Island Rec. Road
Fortress Butte Ridge Road
Coulee
Hideaway Ridge Rd.
Kid Curry Hideaway Historic Monument
Hideaway
Hideaway Ridge
Antelope Ridge Road
Antelope Creek
191
A
B
Power Plant Road
FERGUS CO.
Wild & Scenic Corridor
MISSOURI RIVER
C.M. Russell National Wildlife Refuge
ANTELOPE CREEK
N
All Wilderness or No Wilderness
Partial Wilderness Alt. 1 (Segment A)
Partial Wilderness Alt. 2 (Segment B)
0
1
2
miles

PROPOSED ACTION — Partial Wilderness Alternative 1 (Seg. A) underground gas lines, involving 3.6 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 13.6 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, to distribute salt. This occurs on an average of once weekly from May through December along 11.0 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are one water well, one reservoir and an electric fence, which is one mile long. The maintenance activities for the well and the reservoir are performed by the operator under cooperative agreements. Water well and reservoir maintenance involves the use of heavy equipment every 20 years. The fence is an exclosure which is maintained by the BLM. Access for maintenance is by foot or by horseback.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 300 recreation visitor days (RVDs) annually. This includes approximately 10 RVDs of vehicle-dependent visits. These levels of use are expected to continue.

ANTELOPE CREEK — PARTIAL WILDERNESS ALTERNATIVE 2

Approximately 2,750 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 9,600 acres of the WSA, none would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Phillips MFP. Management on 4,373 acres classed "scenic" as lands would be consistent with Upper Missouri Wild and Scenic River ((UMWSR) designation and associated plans. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Oil and Gas Development Actions

In the portion recommended as suitable for wilderness designation, the entire 2,750 acres would be withdrawn from mineral leasing. There are no lands within the UMWSR corridor. The most likely scenario projects one successful well that would not be drilled due to restrictions associated with wilderness designation.

Of the 9,600 acres recommended as nonsuitable, 4,373 acres are within the UMWSR corridor. The 4,373 acres are classed as "scenic" and so none are withdrawn from activities associated with mineral leasing. However, development activities associated with mineral leases on the 4,373 acres would be restricted.

The most likely scenario, based on UMWSR factors and historic activity in and around the area, is that eight gas wells would be drilled in the 5,227 acres in the WSA that are outside of the UMWSR corridor. A one-acre pad would be cleared at each of the eight well sites. Eight miles of road involving 13.6 acres would be constructed within the WSA. Two of the wells would be successful and six would be dry holes. Two and one-half miles of underground gas lines, involving 3 acres, would be installed from the wells to pumping and storage facilities outside of the WSA. The 11 acres associated with the well pads and the underground lines would be recontoured and reseeded within one season and revegetated within 5 years. The roads would be recontoured and reseeded at the end of well life, approximately 15 years for the successful wells.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 2,750 acres recommended as suitable or the 9,600 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 2,750 acres recommended as suitable, livestock management actions such as checking livestock would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. The only existing range project is a water well. Maintenance would be done with heavy equipment once every 20 years.

For the 9,600 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, distribute salt. This occurs on an average of once weekly during May through December along 9.75 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects is one reservoir. All maintenance activities are performed by the operator under cooperative agreement. Reservoir maintenance involves the use of heavy equipment every 20 years. One mile of electric fence serves as an exclosure. It is maintained by the BLM using nonmotorized access.

Recreational ORV Use Actions

On the 2,750 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 9,600 acres recommended as non-suitable, recreational ORV use would continue at 250 RVDs annually.

ANTELOPE CREEK — ALL WILDERNESS ALTERNATIVE

All 12,350 acres of the Antelope Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Oil and Gas Development Actions

The entire 12,350 acres would be withdrawn from mineral leasing. This withdrawal would include the 4,373 acres within the UMWSR corridor. These lands classed as "scenic" are not currently withdrawn.

The most likely scenario, based on restrictions associated with the UMWSR corridor and wilderness designation, is that no wells would be drilled.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of the reservoir and water well would be done with heavy equipment once every 20 years.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

BRIDGE COULEE — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 5,900 acres of Bridge Coulee WSA would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest. (Figure 2.7)

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from mid-April through mid-December along 3 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are four reservoirs and two fences, totalling 4.75 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance and maintenance of the two proposed water savers involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 100 recreation visitor days (RVDs) annually. These levels of use are expected to continue.

BRIDGE COULEE — ALL WILDERNESS ALTERNATIVE

All 5,900 acres of the Bridge Coulee WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

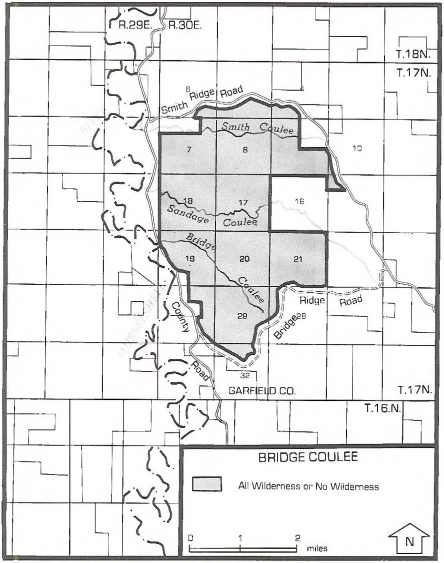
Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Improvement Development Actions

Livestock management actions, such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

FIGURE 2.7 BRIDGE COULEE (MT-024-675) ALTERNATIVES MAP



R.29E.
R.30E.
T.18N.
T.17N.
Smith Ridge Road
Smith Coulee
Sandage Coulee
Bridge Coulee
Bridge Ridge Road
County Road
6
7
8
10
16
17
18
19
20
21
28
29
32
GARFIELD CO.
T.17N.
T.16.N.
BRIDGE COULEE
All Wilderness or No Wilderness
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of the four reservoirs would be done with heavy equipment once every 20 years.

The 4.75 miles of existing fence would be maintained without the use of a motorized vehicle.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

MUSSELSHELL BREAKS — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 8,650 acres of Musselshell Breaks WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Jordan-North Rosebud transition MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest. (Figure 2.8)

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from mid-April through mid-December along 7.5 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are two reservoirs and six fences totalling 6.9 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance and maintenance of the two proposed water savers involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Maintenance of the proposed pipeline involves system startup (bleeding air from lines) in the spring and drainage of the system in the fall. This involves hand tools and vehicular access. Repair of breaks occurs on the average every 10 years. It involves vehicular access and hand tools or occasionally a backhoe. Each break involves approximately 20 square feet of surface disturbance, which requires recontouring and revegetating with native species.

Construction of New Range Improvement Actions

Approximately 2 miles of new underground water pipeline and two water catchments would be constructed using motorized equipment.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 150 recreation visitor days (RVDs) annually. This includes approximately five RVDs of vehicle-dependent visits. These levels of use are expected to continue.

MUSSELSHELL BREAKS — ALL WILDERNESS ALTERNATIVE

All 8,650 acres of the Musselshell Breaks WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there was no practical alternative. Maintenance of the two existing reservoirs and two proposed catchments would be done with heavy equipment once every 20 years.

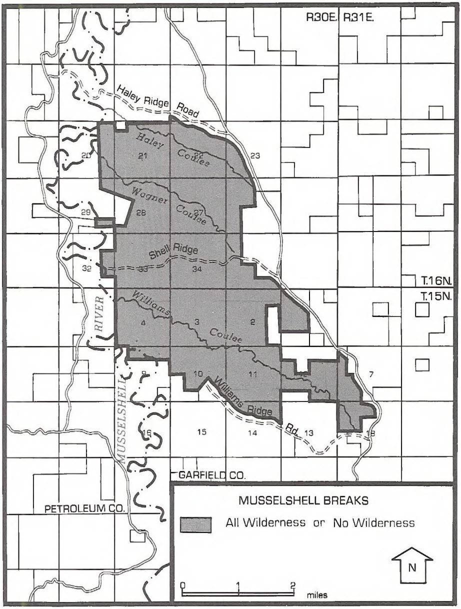
The 6.9 miles of existing fence would be maintained without the use of a motorized vehicle.

Maintenance of the proposed pipeline involves system startup (bleeding air from lines) in the spring and drainage of the system in the fall. This involves hand tools and vehicular access. Repair of breaks occurs on the average every 10 years. It involves vehicular access and hand tools, or occasionally, a backhoe. Each break involves approximately 20 square feet of surface disturbance, which requires recontouring and revegetating with native species.

Construction of New Range Improvement Actions

Approximately 2 miles of new underground water pipeline and two water catchments would be constructed using motorized equipment.

FIGURE 2.8 MUSSELSHELL BREAKS (MT-024-677) ALTERNATIVES MAP


R30E.
R31E.
Haley Ridge Road
Haley Coulee
Wagner Coulee
Shell Ridge
Williams Coulee
Williams Ridge Rd.
T.16N.
T.15N.
20
21
22
23
29
28
27
32
33
34
4
3
2
9
10
11
12
7
16
15
14
13
18
RIVER
MUSSELSHELL
GARFIELD CO.
PETROLEUM CO.
MUSSELSHELL BREAKS
▨ All Wilderness or No Wilderness
N
0
1
2
miles

PROPOSED ACTION — No Wilderness

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

BILLY CREEK — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

None of the 3,450 acres of Billy Creek WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest. (Figure 2.9)

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock. This occurs on an average of once weekly from mid-April through mid-December along 1.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are five reservoirs. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance of the five reservoirs involves the use of heavy equipment every 20 years.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 25 recreation visitor days (RVDs) annually. These levels of use are expected to continue.

BILLY CREEK — PARTIAL WILDERNESS ALTERNATIVE 1

Approximately 1,650 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Of the remaining 1,800 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 1,650 acres recommended as suitable or the 1,800 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 1,650 acres recommended as suitable, livestock management actions such as checking livestock would be done without motorized vehicles. It would be done on foot or by horseback.

Existing projects would be maintained using motorized equipment only when there was no practical alternative. Existing range projects include three reservoirs. Maintenance for each of the three reservoirs would be done with heavy equipment once every 20 years.

There would be no substitution of horses or foot labor for motorized vehicle use. There are no vehicle ways and the area is small, so livestock management is done on foot or by horseback.

For the 1,800 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, distribute salt. This occurs on an average of once weekly throughout most of the year along 1.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are two reservoirs. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years.

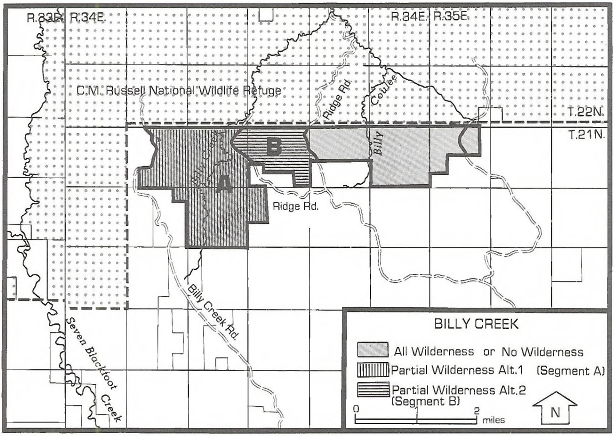
Recreational ORV Use Actions

On the 1,650 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 1,800 acres recommended as nonsuitable, recreational ORV use would continue at 25 RVDs annually.

BILLY CREEK — PARTIAL WILDERNESS ALTERNATIVE 2

Approximately 550 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

FIGURE 2.9 BILLY CREEK (MT-024-633) ALTERNATIVES MAP


R.33E.
R.34E.
R.34E.
R.35E.
C.M. Russell National Wildlife Refuge
Ridge Rd.
Coulee
Billy
Billy Creek
B
A
T.22N.
T.21N.
Ridge Rd.
Billy Creek Rd.
Seven Blackfoot Creek
BILLY CREEK
All Wilderness or No Wilderness
Partial Wilderness Alt.1 (Segment A)
Partial Wilderness Alt.2 (Segment B)
0
1
2
miles
N

PROPOSED ACTION — No Wilderness

Of the remaining 2,900 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Big Game Population Levels — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 550 acres recommended as suitable or the 2,900 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Levels Actions

For the 550 acres recommended as suitable, livestock management actions such as checking livestock would be done without motorized vehicles. It would be done on foot or by horseback.

There are no range projects.

There would be no substitution of horses or foot labor for motorized vehicle use. There are no vehicle ways and the area is small so livestock management is done on foot or on horseback.

For the 2,900 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, distribute salt. This occurs on an average of once weekly throughout most of the year along 1.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are five reservoirs. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the five reservoirs would occur every 20 years.

Recreational ORV Use Levels Actions

On the 550 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 2,900 acres recommended as nonsuitable, recreational ORV use would continue at 25 RVDs annually.

BILLY CREEK — ALL WILDERNESS ALTERNATIVE

All 3,450 acres of the Billy Creek WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of the five reservoirs would be done with heavy equipment once every 20 years.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 1,800 acres recommended as nonsuitable, recreational ORV use would continue at 25 RVDs annually.

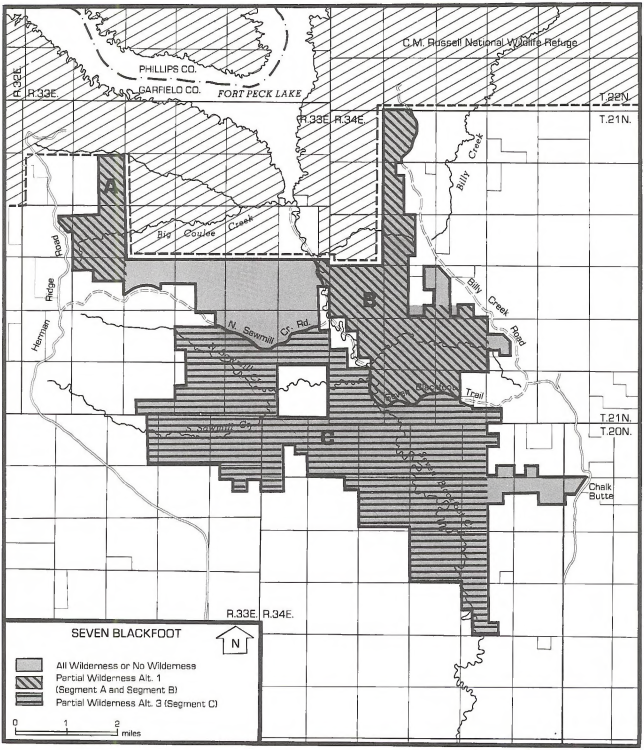
SEVEN BLACKFOOT — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE 1)

Approximately 5,710 acres of the Seven Blackfoot WSA would be recommended as suitable for wilderness designation. This acreage is in two segments. One segment encompasses the headwaters of Big Coulee at the western end of the northwestern roadless area. It comprises 1,160 acres of that 3,950 acre roadless area. The other segment is 4,550 acres of the 4,850 acres northeastern roadless area. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. (Figure 2.10)

Of the remaining 14,540 acres of the WSA, none would be recommended as suitable for wilderness. The 14,540 acres is composed of the entire 11,450 acres of the southern roadless area, the remaining 2,790 acres of the northwest roadless area, and 300 acres (peninsulas) of the northeastern roadless area. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Note: In the DEIS, the preferred alternative was composed of two partial alternatives (1 and 2), which had been treated in two separate narratives. These two narratives have been combined into one narrative and labelled as partial alternative 1, which is the proposed action. The boundaries and acreages of the preferred

FIGURE 2.10 SEVEN BLACKFOOT (MT-024-657) ALTERNATIVES MAP


C.M. Russell National Wildlife Refuge
PHILLIPS CO.
GARFIELD CO.
FORT PECK LAKE
R.32E.
R.33E.
R.33E. R.34E.
T.22N.
T.21N.
T.20N.
A
B
C
Big Coulee Creek
Billy Creek
Billy Creek Road
Herman Ridge Road
N. Sawmill Cr. Rd.
N. Sawmill Cr.
S. Sawmill Cr.
Seven Blackfoot Trail
Seven Blackfoot Cr.
Chalk Butte
R.33E. R.34E.
SEVEN BLACKFOOT
N
All Wilderness or No Wilderness
Partial Wilderness Alt. 1 (Segment A and Segment B)
Partial Wilderness Alt. 3 (Segment C)
0
1
2
miles

PROPOSED ACTION — Partial Wilderness Alternative 1 (Segments A & B) alternative in the DEIS are identical to the proposed action in this document.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 5,710 acres recommended as suitable or the 14,540 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 5,710 acres recommended as suitable, livestock management actions, such as checking livestock and inspecting fence, would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there was no practical alternative. Existing range projects include five reservoirs and 0.25 mile of fence.

Maintenance for each of the reservoirs would be done with heavy equipment once every 20 years.

The 0.25 mile of existing fence would be maintained without the use of a motorized vehicle.

There would be no substitution of horses or foot labor for motorized vehicle use. There are no vehicle ways and the acreage is small and of rough terrain, so livestock management is done on foot or on horseback.

For the 14,540 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly throughout most of the year along 11.25 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 11 reservoirs, a spring, and 10 miles of fence. All maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the reservoirs and three planned reservoirs would occur every 20 years. Fence maintenance of 10 miles of existing fence and 3 miles of planned fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools. Spring maintenance occurs on an as-needed basis.

Construction of New Range Improvement Actions

There are no new range improvements planned for the 5,710 acres recommended as suitable.

In the remaining 14,540 acres recommended as nonsuitable, three reservoirs and 3 miles of fence would be constructed.

Recreational ORV Use Actions

On the 5,710 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing, distribution of maps, and monitoring. On the 14,540 acres recommended as nonsuitable, recreational ORV use would continue at 200 RVDs annually.

SEVEN BLACKFOOT — NO WILDERNESS/NO ACTION ALTERNATIVE

None of the 20,250 acres of Seven Blackfoot WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from mid-March through mid-November along 11.25 miles of vehicle way.

Existing and planned range projects would be maintained using motorized equipment. The existing projects are 16 reservoirs and 10 fences, totalling 10.25 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance of the 19 reservoirs (16 existing and three planned) involves the use of heavy equipment every 20 years. Maintenance of 13.25 miles (10.25 existing and 3 planned) of fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Construction of New Range Improvement Actions

Three reservoirs and approximately 3 miles of new fence would be constructed using motorized equipment.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 200 recreation visitor days (RVDs) annually. This includes approximately 10 RVDs of vehicle dependent visits. These levels of use are expected to continue.

SEVEN BLACKFOOT — PARTIAL WILDERNESS ALTERNATIVE 3

Approximately 11,030 acres of the Seven Blackfoot WSA would be recommended as suitable for wilderness designation. This is the entire southern roadless area, except for a 420 acre "peninsula" on the east edge. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. In the draft EIS the acreage for this alternative was incorrectly listed as 11,450. The boundary of this alternative in this document is identical to that in the DEIS.

Of the remaining 9,220 acres of the WSA, none would be recommended as suitable for wilderness. Management would be in compliance with the Musselshell MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources or timber harvest.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 11,450 acres recommended as suitable or the 8,800 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 11,030 acres recommended as suitable, livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing and planned range projects would be maintained using motorized equipment only when there was no practical alternative. Existing range projects include 10 reservoirs, a spring and eight fences, totalling 10.25 miles.

Maintenance for each of the 13 reservoirs (10 existing and 3 planned) would be done with heavy equipment once every 20 years.

The 10 miles of existing fence would be maintained without the use of a motorized vehicle.

For the 9,220 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly throughout most of the year along 3 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are six reservoirs and 0.25 mile of fence. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance of 0.25 mile of existing fence and 3 miles of planned fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Construction of New Range Improvement Actions

For the 11,030 acres recommended as suitable, three new reservoirs would be built.

In the remaining 9,220 acres recommended as nonsuitable, 3 miles of fence would be constructed.

Recreational ORV Use Actions

On the 11,030 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 9,220 acres recommended as nonsuitable, recreational ORV use would continue at 50 RVDs annually.

SEVEN BLACKFOOT — ALL WILDERNESS ALTERNATIVE

All 20,250 acres of the Seven Blackfoot would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing and planned range projects would be maintained using motorized equipment only when there was no practical alternative. Maintenance of the 19 reservoirs (16 existing and three planned) would be done with heavy equipment once every 20 years.

The 10.25 miles of existing fence and the 3 miles of proposed fence would be maintained without the use of a motorized vehicle.

Construction of New Range Improvement Actions

Three reservoirs and approximately 3 miles of new fence would be constructed using motorized equipment.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

BURNT LODGE — PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)

All 13,730 acres of the Burnt Lodge WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. (Figure 2.11)

Big Game Management Actions

MULE DEER

There are no actions specifically intended to change the population levels of mule deer.

ELK

There are no actions specifically intended to change the population levels of elk.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of the four reservoirs would be done with heavy equipment once every 20 years.

The 6.25 miles of existing fence would be maintained without the use of a motorized vehicle.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

BURNT LODGE — NO WILDERNESS/ NO ACTION ALTERNATIVE

None of the 13,730 acres of Burnt Lodge WSA would be recommended as suitable for wilderness under this alternative. Management would be in compliance with the Valley MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, minerals, vegetation, fire control, cultural resources, or timber harvest.

Big Game Management Actions

MULE DEER

There are no actions specifically intended to change the population levels of mule deer.

ELK

There are no actions specifically intended to change the population levels of elk.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly year around along 13.6 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are four reservoirs and four fences totalling 6.25 miles. The majority of maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. All of the existing fence is along the boundary of the area and so would normally be maintained without bringing a motorized vehicle into the area. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 500 recreation visitor days (RVDs) annually. This includes approximately five RVDs of vehicle dependent visits. These levels of use are expected to continue.

TERRY BADLANDS — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE 2)

Approximately 28,520 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values. Of the remaining 14,430 acres of the WSA, none would be recommended as suitable. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. (Figure 2.12)

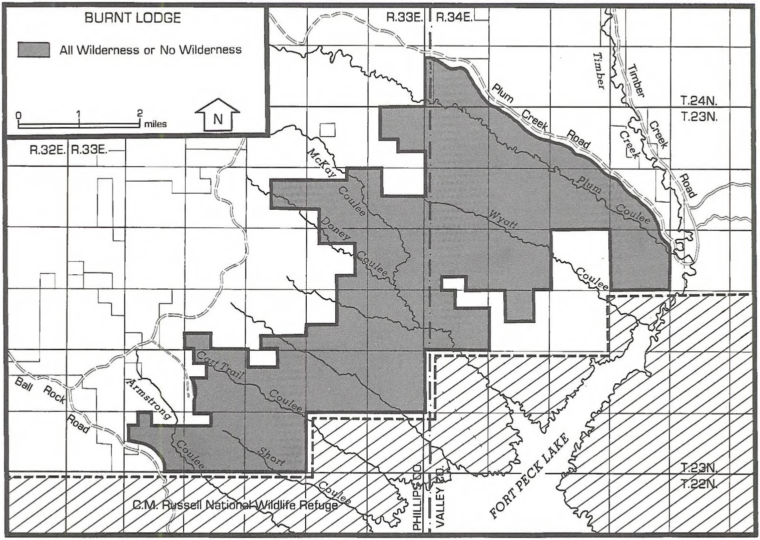
Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 28,520 acres recommended as suitable or the 14,430 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

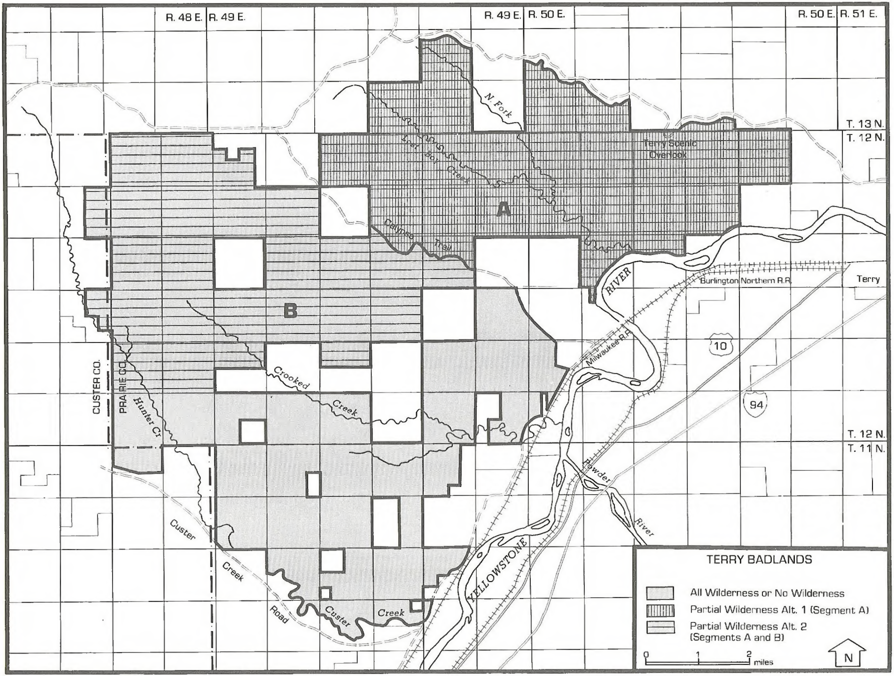
For the 28,520 acres recommended as suitable, livestock management actions such as checking livestock

FIGURE 2.11 BURNT LODGE (MT-065-278) ALTERNATIVES MAP


BURNT LODGE
All Wilderness or No Wilderness
0
1
2
miles
N
R.33E.
R.34E.
R.32E.
R.33E.
T.24N.
T.23N.
T.23N.
T.22N.
Plum Creek Road
Timber
Timber Creek Road
Creek
McKay Coulee
Doney Coulee
Wyatt
Plum Coulee
Coulee
Cart Trail Coulee
Armstrong Coulee
Short Coulee
Ball Rock Road
C.M. Russell National Wildlife Refuge
PHILLIPS CO.
VALLEY CO.
FORT PECK LAKE

PROPOSED ACTION — All Wilderness

FIGURE 2.12 TERRY BADLANDS (MT-024-684) ALTERNATIVES MAP


R. 48 E.
R. 49 E.
R. 49 E.
R. 50 E.
R. 50 E.
R. 51 E.
T. 13 N.
T. 12 N.
T. 12 N.
T. 11 N.
N. Fork
Lost Boy Creek
Terry Scenic Overlook
A
Calypso Trail
B
RIVER
Burlington Northern R.R.
Terry
Milwaukee R.R.
10
94
Crooked Creek
CUSTER CO.
PRAIRIE CO.
Hunter Cr
Powder River
Custer Creek Road
Custer Creek
YELLOWSTONE
TERRY BADLANDS
All Wilderness or No Wilderness
Partial Wilderness Alt. 1 (Segment A)
Partial Wilderness Alt. 2 (Segments A and B)
0
1
2
miles
N

PREFERRED ALTERNATIVE — Partial Wilderness Alternative 2 (Segments A & B) and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing projects would be maintained using motorized equipment only when there was no practical alternative. Existing range projects include 11 reservoirs, five springs, four wells and seven fences, totalling 8.5 miles.

The 8.5 miles of existing fence would be maintained without the use of a motorized vehicle.

Maintenance for each of the 11 reservoirs and four wells would be done with heavy equipment once every 20 years.

The five springs would be maintained on an as needed basis using hand tools.

For the 14,430 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly throughout most of the year along 11.5 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are five reservoirs, five wells, and 8.0 miles of fence. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the five reservoirs, and the four wells would occur every 20 years. Fence maintenance of 8.0 miles of existing fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

On the 28,520 acres recommended as suitable, recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring. On the 14,430 acres recommended as nonsuitable, recreational ORV use would continue.

Minerals — Coal Mining Actions

Three Preference Right Lease Applications (PRLAs) for coal and associated state and private coal overlay approximately 7,600 acres within the unsuitable portion of the Terry Badlands WSA. These Meadowlark Farms PRLAs are in the southwest corner of the WSA. Two conditions are necessary to allow mining: (1) Meadowlark Farms, Inc. must demonstrate that commercial quantities of coal exist. (2) An environmental assessment must be prepared. If sensitive areas are identified, then the Secretary could request statutory compensation for Meadowlark Farms or could negotiate an exchange with Meadowlark Farms for minerals or bidding rights on coal.

The following scenario is speculative, but reasonable. It is based on the assumptions that Meadowlark Farms demonstrates that commercial quantities of coal exist and that exchange of mineral rights does not occur.

A surface mine would be opened utilizing a dragline to remove overburden. The lignite would be loaded by shovels into coal haul trucks for transportation to loading facilities. The initial box cut would be opened at the cropline on the east side of the lignite field. The cut would be oriented in a north-south direction and would progress westward. This progression would be continued until the reserve is exhausted or the depth of overburden becomes too great.

Loading facilities would be located along the east side of the coal field, which would give good access to the abandoned Milwaukee Railroad roadbed. Overburden handling would be based on analysis that would be completed prior to mining. Conventional farming techniques would be employed to prepare the replaced topsoil material for seeding.

TERRY BADLANDS — NO WILDERNESS/ NO ACTION ALTERNATIVE

None of the 42,950 acres of Terry Badlands WSA would be recommended as suitable for wilderness under the proposed action. Management would be in compliance with the New Prairie transition MFP. No actions would be taken specifically to retain the wilderness characteristics of the area. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly from mid-April through mid-December along 24.5 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 16 reservoirs, five spring developments, nine wells, and 10 fences, totalling 16.5 miles. All maintenance activities are performed by the operator under cooperative agreements. Reservoir maintenance involves the use of heavy equipment every 20 years. Fence maintenance involves the use of a vehicle annually. Approximately half of the existing fence is along the west boundary of the area and so would normally be maintained without bringing a motorized vehicle into the area. The remaining fence would be maintained using a motorized vehicle. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

Recreational ORV use levels would continue at approximately 400 recreation visitor days (RVDs) annually. This includes approximately 15 RVDs of vehicle dependent visits. This use is expected to continue.

Minerals — Coal Mining Actions

Three Preference Right Lease Applications (PRLAs) for coal and associated state and private coal overlay approximately 7,600 acres within the Terry Badlands WSA. These Meadowlark Farms PRLAs are in the southwest corner of the WSA. Two conditions are necessary to allow mining: (1) Meadowlark Farms, Inc. must demonstrate that commercial quantities of coal exist. (2) An environmental assessment must be prepared. If sensitive areas are identified, then the Secretary could request statutory compensation for Meadowlark Farms or could negotiate an exchange with Meadowlark Farms for minerals or bidding rights on coal.

The following scenario is speculative, but reasonable. It is based on the assumptions that Meadowlark Farms demonstrates that commercial quantities of coal exist and that exchange of mineral rights does not occur.

A surface mine would be opened utilizing a dragline to remove overburden. The lignite would be loaded by shovels into coal haul trucks for transportation to loading facilities. The initial box cut would be opened at the cropline on the east side of the lignite field. The cut would be oriented in a north-south direction and would progress westward. This progression would be continued until the reserve is exhausted or the depth of overburden becomes too great.

Loading facilities would be located along the east side of the coal field, which would give good access to the abandoned Milwaukee Railroad roadbed. Overburden handling would be based on analysis that would be completed prior to mining. Conventional farming techniques would be employed to prepare the replaced topsoil material for seeding.

TERRY BADLANDS — PARTIAL WILDERNESS ALTERNATIVE 1

Approximately 14,670 acres would be recommended as suitable for wilderness. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunity for solitude, and supplemental scenic values. There are no management actions projected for wildlife, vegetation, fire control, cultural resources or timber harvest. Of the remaining 28,280 acres of the WSA, none would be recommended as suitable.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer in either the 14,670 acres recommended as suitable or the 28,280 acres recommended as nonsuitable.

Livestock Management and Existing Range Project Maintenance Actions

For the 14,670 acres recommended as suitable, livestock management actions such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Existing range projects include one well, three springs, and two fences, totalling 1.25 miles.

Maintenance of each of the wells would be done with heavy equipment once every 20 years.

The 1.25 miles of existing fence would be maintained without the use of a motorized vehicle.

For the 28,280 acres recommended as nonsuitable, livestock management involves using motorized vehicles to check livestock and, for example, inspect fence and distribute salt. This occurs on an average of once weekly throughout most of the year along 21.5 miles of vehicle way.

Existing range projects would be maintained using motorized equipment. The existing projects are 16 reservoirs, eight wells, two springs and 15.25 miles of fence. All maintenance activities are performed by the operator under cooperative agreements. Reservoir and well maintenance involves the use of heavy equipment every 20 years. Maintenance of each of the 16 reservoirs and the eight wells would occur every 20 years. Fence maintenance of 15.25 miles of existing fence involves the use of a vehicle annually. Posts are replaced and fences are stretched using hand tools.

Recreational ORV Use Actions

On the 14,670 acres recommended as suitable, recreational ORV use would be prohibited by, for example signing along the boundary, distribution of maps, and monitoring. On the 28,280 acres recommended as nonsuitable, recreational ORV use would continue.

Minerals — Coal Mining Actions

Three Preference Right Lease Applications (PRLAs) for coal and associated state and private coal overlay approximately 7,600 acres within the nonsuitable portion of the Terry Badlands WSA. These Meadowlark Farms PRLAs are in the southwest corner of the WSA. Two conditions are necessary to allow mining: (1) Meadowlark Farms, Inc. must demonstrate that commercial quantities of coal exist. (2) An environmental assessment must be prepared. If sensitive areas are identified, then the Secretary could request statutory compensation for Meadowlark Farms or could negotiate an exchange with Meadowlark Farms for minerals or bidding rights on coal.

The following scenario is speculative, but reasonable. It is based on the assumptions that Meadowlark Farms demonstrates that commercial quantities of coal exist and that exchange of mineral rights does not occur.

A surface mine would be opened utilizing a dragline to remove overburden. The lignite would be loaded by shovels into coal haul trucks for transportation to loading facilities. The initial box cut would be opened at the cropline on the east side of the lignite field. The cut would be oriented in a north-south direction and would progress westward. This progression would be continued until the reserve is exhausted or the depth of overburden becomes too great.

Loading facilities would be located along the east side of the coal field, which would give good access to the old Milwaukee Railroad roadbed. Overburden handling would be based on analysis that would be completed prior to mining. Conventional farming techniques would be employed to prepare the replaced topsoil material for seeding.

TERRY BADLANDS — ALL WILDERNESS ALTERNATIVE

All 42,950 acres of the Terry Badlands WSA would be recommended as suitable for wilderness designation. Mineral leasing would cease, livestock management and project maintenance would continue with restrictions on the use of motorized vehicles, and recreational ORV use would be prohibited. The area would be administered to preserve its naturalness, outstanding opportunities for solitude, and supplemental scenic values.

Big Game Management Actions — Mule Deer

There are no actions specifically intended to change the population levels of mule deer.

Livestock Management and Existing Range Project Maintenance Actions

Livestock management such as checking livestock and inspecting fence would be done without motorized vehicles. It would be done on foot or by horseback.

Existing range projects would be maintained using motorized equipment only when there is no practical alternative. Maintenance of the 16 reservoirs and nine wells would be done with heavy equipment once every 20 years.

The 16.5 miles of existing fence and the five springs would be maintained without the use of a motorized vehicle.

Recreational ORV Use Actions

Recreational ORV use would be prohibited by, for example, signing along the boundary, distribution of maps, and monitoring.

Minerals — Coal Mining Actions

Three Preference Right Lease Applications (PRLAs) for coal and associated state and private coal overlay approximately 7,600 acres within the Terry Badlands WSA. These Meadowlark Farms PRLAs are in the southwest corner of the WSA. Two conditions are necessary to allow mining: (1) Meadowlark Farms, Inc. must demonstrate that commercial quantities of coal exist. (2) An environmental assessment must be prepared. If sensitive areas are identified, then the Secretary could request statutory compensation for Meadowlark Farms or could negotiate an exchange with Meadowlark Farms for minerals or bidding rights on coal. The following scenario is speculative, but reasonable. It is based on the assumptions that Meadowlark Farms demonstrates that commercial quantities of coal exist and that exchange of minerals rights occur.

The following coal issue scenario is speculative, but reasonable. It is based on the assumption Meadowlark Farms demonstrates commercial quantities of coal exist, but that compensation is provided for Meadowlark Farms mineral rights.

No mining would occur.

TABLE 2.1: SUMMARY OF IMPACTS

DOG CREEK SOUTH

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness of the area would be reduced on 15 percent of the WSA in the southwestern corner by gas well facilities. Opportunities for solitude and primitive unconfined recreation would be reduced on 20 percent of the WSA by gas drilling activities.	The naturalness of 25 percent of the WSA would be enhanced by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced by the elimination of recreational ORV use and reduction of mechanized equipment use for range development maintenance.
Impacts on Oil and Gas Development Levels	There would be no impact on oil and gas development levels.	The opportunity to drill two gas wells would be foregone.
Impacts on Big Game Population Levels - Mule Deer	Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development ocurred.	The mule deer population level would incrase from a range of 20 to 80 to 22 to 88.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock management or the maintenance of range projects.	The checking of livestock and range development maintenance could continue, but the three permittees would incur additional costs of $275 and 75 hours of labor time annually.
Impacts on Recreation ORV Use Levels	There would be no impacts on levels of recreational ORV use.	Recreational ORV use would decline from 150 RVDs to zero.

STAFFORD

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness and solitude of area would be reduced by gas development on 10 percent of the WSA in the northcentral portion by gas well facilities.	The naturalness of the Stafford WSA would increase on 10 percent of the WSA due to the revegetation of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on 20 percent of the WSA.
Impacts on Oil and Gas Development Levels	There would be no impact on oil and gas development levels.	The opportunity to drill two gas wells would be foregone.
Impacts on Big Game Population Levels - Mule Deer	Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.	Mule deer population levels would increase from a range of 20 to 90 to a range of 22 to 100.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock checking or range development maintenance levels.	The checking of livestock and range development maintenance could continue, but the permittee would incur additional costs of $130 annually and 35 hours of labor time.
Impacts on Recreation ORV Use Levels	There would be no impact on levels of recreational ORV use.	Recreational ORV use would decline from 75 RVDs to zero.

ERVIN RIDGE

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness of area would be reduced on 25 percent of the area along the western and northern boundaries due to gas well development. Opportunities for solitude and primitive and unconfined recreation would be reduced 25 percent by gas development activities.	The naturalness of 20 percent along the northern boundary of the WSA would be enhanced by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced on 25 percent of the WSA due to the elimination of recreational ORV use and reduction of mechanized equipment for range development maintenance.
Impacts on Big Game Population Levels - Mule Deer	There would be no impact on oil and gas development levels.	The opportunity to drill eight gas wells would be foregone.

TABLE 2.1: CONTINUED

ERVIN RIDGE (Continued)

	Proposed Action - No Wilderness	All Wilderness
Impacts on Oil and Gas Development Levels	Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.	Mule deer population levels would increase from a range of 40 to 160 to a range of 45 to 175.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock management or the maintenance of range projects.	The checking of livestock and range development maintenance could continue, but the two permittees would incur additional costs of $240 and 65 hours of labor time annually.
Impacts on Recreation ORV Use Levels	There would be no impacts on levels of recreational ORV use.	Recreational ORV use would decline from 100 RVDs to zero.

WOODHAWK

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness of the southwest portion of the WSA, comprising 20 percent of it, would be reduced by gas development. Opportunities for solitude and primitive and unconfined recreation would be reduced on approximately 25 percent of the WSA.	The naturalness of the Woodhawk WSA would increase on 10 percent due to the revegetation of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on 15 percent of the WSA.
Impacts on Oil and Gas Development Levels	There would be no impact on oil and gas development levels.	The opportunity to drill four gas wells would be foregone.
Impacts on Big Game Population Levels - Mule Deer	Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.	Mule deer population levels would increase from a range of 30 to 150 to a range of 35 to 165.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock checking or range livestock maintenance levels.	The checking of livestock and range development maintenance could continue, but the two permittees would incur additional costs of $85 annually and 20 hours of labor time.
Impacts on Recreation ORV Use Levels	There would be no impact on levels of recreational ORV use.	Recreational ORV use would decline from 400 to zero.

COW CREEK

	Proposed Action - Partial	No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness would be enhanced on 7 percent of the suitable portion by the revegetation of vehicle ways. The outstanding opportunities for solitude would be enhanced on 10 percent of the suitable portion by the elimination of recreational ORV use and the reduction of the use of mechanized equipment for range development maintenance. Naturalness would be reduced on 65 percent of the nonsuitable portions outside of the UMWSR corridor due to gas facilities. The opportunities for solitude or primitive and unconfined recreation, neither of which is outstanding, would be further reduced for these portions.	Naturalness would be reduced on 25 percent of the WSA due to gas development. Opportunities for solitude and primitive recreation would be reduced on 30 percent of the WSA due to gas well drilling activities.	Naturalness would be enhanced on 30 percent of the WSA by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced by the elimination of recreational ORV use and reduction of mechanized equipment for range development maintenance.

TABLE 2.1: CONTINUED

COW CREEK (Continued)

	Proposed Action - Partial	No Wilderness	All Wilderness
Impacts on Oil and Gas Development Levels	The opportunity to drill 32 gas wells would be foregone.	There would be no impact on oil and gas development levels.	The opportunity to drill 50 gas wells would be foregone.
Impacts on Big Game Population Levels - Mule Deer	Mule deer population levels would increase from a range of 135 to 530 to a range of between 145 to 580.	Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.	Mule deer population levels would increase from a range of 135 to 530 to a range of between 145 to 580.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	The checking of livestock and range development maintenance could continue, but the three permittees would incur additional cost of $564 annually and 150 hours of labor time. There would be no impact on livestock management, or the maintenance of range projects in the 11,460 acres recommended as nonsuitable for wilderness designation.	There would be no impact on livestock management or the maintenance of range projects.	The checking of livestock and range development maintenance could continue, but the grazing users would incur additional costs of $1,165 and 310 hours of labor time annually.
Impacts on Construction of New Range Improvement Projects	There would be no impact on construction of new range projects.	There would be no impact on construction of new range improvement projects.	There would be no impact on construction of new range projects.
Impacts on Recreation ORV Use Levels	Recreational ORV use levels would decline from 450 RVDs, including 15 vehicle dependent RVDs to 200 RVDs, including 10 vehicle dependent RVDs.	There would be no impacts on levels of recreational ORV use.	Recreational ORV use levels would decline from 450 RVDs, including 15 vehicle dependent RVDs to zero.

ANTELOPE CREEK

	Proposed - Partial	No Wilderness	Partial-Alt. 2	All Wilderness
Impacts on Wilderness Values	Naturalness of the 9,600 acre western roadless area would increase on 25 percent along the northern boundary due to revegetation of vehicle ways. Opportunities for solitude and primitive recreation would improve on the northern 25 percent. The naturalness of the 2,750 acre eastern roadless area would be reduced due to gas well developments. Opportunities for solitude and primitive recreation would be reduced by gas well activity and development and dispersed ORV use.	Naturalness would be reduced by gas developments on the northern 30 percent of the WSA. Opportunities for solitude and primitive and unconfined recreation would be reduced on approximately 45 percent of the WSA.	For the 2,750 acre eastern roadless area, naturalness would be enhanced on 10 percent and solitude would be enhanced on 15 percent of it due to the elimination of recreational ORV use. For the 9,600 acre western roadless area, naturalness would be reduced on 25 percent of it due to gas facilities. Solitude would be reduced by gas drilling activities on 40 percent of the western roadless area.	Naturalness of the Antelope Creek WSA would increase on 20 percent of the WSA due to the revegetation of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on the northern 20 percent of the WSA.
Impacts on Oil and Gas Development Levels	Four gas wells would be drilled. The opportunity to drill eight gas wells would be foregone.	Twelve wells would be drilled. There would be no impact on oil and gas development levels.	Eight gas wells would be drilled. The opportunity to drill four gas wells would be foregone.	No gas wells would be drilled. The opportunity to drill 12 gas wells would be foregone.
Impacts on Big Game Population Levels - Mule Deer	The mule deer population level in the WSA would increase from a range of 50 to 195 to a range of 55 to 210.	Mule deer population would continue at a level of between 50 and 195. Displacement would occur temporarily while gas well development occurred.	Mule deer population levels would continue to range from between 50 to 195.	Mule deer population levels would increase to a range of 55 to 210.

TABLE 2.1: CONTINUED

ANTELOPE CREEK (Continued)

	Proposed - Partial	No Wilderness	Partial-Alt. 2	All Wilderness
Impacts on Livestock Management and Existing Range Project Maintenance Levels	The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $460 annually and 120 hours of labor time.	There would be no impact on livestock checking or range project maintenance levels.	The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $130 annually and 20 hours of labor time.	The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $530 annually and 140 hours of labor time.
Impacts on Recreation ORV Use Levels	The annual ORV use level would drop from 300 to 50 RVOs.	There would be no impact on levels of recreational ORV use.	Levels of ORV use would decline from 300 RVDs, of which 10 are vehicle dependent use to 250 RVDs, of which five are vehicle dependent use.	ORV use levels would decline from 300 to zero RVOs annually.

BRIDGE COULEE

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness and outstanding opportunities of the WSA would be retained.	The naturalness, outstanding opportunities for solitude, and the opportunities for primitive recreation of the WSA would be enhanced.
Impacts on Big Game Population Levels - Mule Deer	Mule deer population levels will not be impacted.	The mule deer population level would increase from a range of 40 to 50 to a level of 44 to 55.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock management or the maintenance of existing range projects.	Two permittees would incur additional costs of $145 and 40 hours of labor time annually.
Impacts on Recreation ORV Use Levels	There would be no impact on recreational ORV use levels.	Recreational ORV use would decline from 100 RVOs to zero.

MUSSELSHELL BREAKS

	Proposed Action - No Wilderness	All Wilderness
Impacts on Wilderness Values	The naturalness of the northern third of the WSA would be insignificantly reduced by new project construction. Other wilderness values would remain unchanged.	The naturalness of the WSA would be insignificantly reduced in the northern third by new project construction and enhanced throughout by the elimination of vehicle ways. Opportunities for solitude and primitive recreation would be enhanced.
Impacts on Big Game Population Levels - Mule Deer	There would be no impact on mule deer population levels.	Mule deer population levels would increase from a range of 35 to 65 to a range of 40 to 70.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock management or the maintenance of existing range projects.	The checking of livestock and range development maintenance could continue, but the five permittees would incur additional costs of $360 and 95 hours of labor time annually.
Impacts on Construction of New Range Improvements	There would be no impact on the construction of 2 miles of pipeline and two water catchments.	There would be no impact on the construction of 2 miles of pipeline and two water catchments.
Impacts on Recreation ORV Use Levels	There would be no impacts on ORV use levels.	Recreational ORV use would decline from 150 RVOs to zero.

TABLE 2.1: CONTINUED

BILLY CREEK

	Proposed-No Wilderness	Partial-Alt. 1	Partial-Alt. 2	All Wilderness
Impacts on Wilderness Values	The wilderness values of the WSA would not be impacted.	The wilderness values of the westernmost roadless area recommended as suitable would be retained. The wilderness values of the eastern three roadless areas would be retained.	The wilderness values on the 550 acres recommended as suitable would be maintained. The wilderness values on the 2,900 acres recommended as nonsuitable would be maintained.	The wilderness values of naturalness would be slightly enhanced on the eastern end due to the revegetation of a vehicle way. The outstanding opportunities for solitude of the WSA would be slightly enhanced by the reduction of motorized vehicle use.
Impacts on Big Game Population Levels - Mule Deer	There would be no impact on the mule deer population.	Mule deer population levels would not be impacted.	Mule deer population levels would not be impacted.	Mule deer population levels would not be impacted.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impact on livestock management or the maintenance of range projects.	For both the suitable and nonsuitable portions there would be no impacts.	For both the suitable and nonsuitable portions there would be no impacts.	Permittees would incur additional costs of $60 and 18 hours of labor time annually.
Impacts on Recreation ORV Use Levels	There would be no impact on recreational use levels.	There would be no impact on recreational use levels.	There would be no impacts on recreational use levels.	Recreational use levels would decline from 25 RVOs to zero.

SEVEN BLACKFOOT

	Proposed Partial (1)	No Wilderness	Partial-Alt. 3	All Wilderness
Impacts on Wilderness Values	The wilderness values of the 5,710 acres recommended as suitable and of the 14,540 acres recommended as nonsuitable would be retained.	The wilderness values of naturalness, outstanding opportunities for solitude on 90 percent of the WSA, primitive recreation and supplemental values would be retained.	Naturalness would be enhanced on 5 percent and opportunities for solitude would be enhanced 6 percent of the 11,030 acres recommended as suitable. Wilderness values would be retained on the 9,220 acres recommended as nonsuitable.	The existing wilderness values would be retained. Naturalness on 2 percent of the WSA and opportunities for solitude on 5 percent of the WSA would be enhanced.
Impacts on Big Game Population Levels - Mule Deer	There will be no impact on mule deer population levels.	There will be no impact on mule deer population levels.	The mule deer population level is expected to increase to a range of 140 to 480.	Mule deer population levels would increase from a range of 135 to 465 to a range of 140 to 500.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	There would be no impacts on livestock management or project maintenance levels.	There would be no impacts.	There would be no impact on livestock management and existing range project maintenance levels. However, seven operators would incur increased costs of $395 and labor time of 105 hours annually.	The permittees would incur annual increased costs of $540 and 145 hours of labor time.
Impacts on Construction of New Range Improvements	There would be no impact on the construction of three reservoirs and 3 miles of fence.	There would be no impact on the construction of three reservoirs and 3 miles of fence.	There would be no impact on the construction of three reservoirs and 3 miles of fence.	There would be no impact on the construction of three reservoirs and 3 miles of fence.
Impacts on Recreation ORV Use Levels	There would be no impact on ORV use levels.	There would be no impact on ORV use levels.	Recreational ORV use would decline from 200 RVOs to 25 annually.	Recreational ORV use levels would decline from 200 RVDs annually to zero.

TABLE 2.1: CONTINUED

BURNT LODGE

	Proposed Action-All Wilderness	No Wilderness
Impacts on Wilderness Values	The naturalness of the WSA would be enhanced along the ridges in the northwest portion of the WSA. Outstanding opportunities for solitude in the southeast 50 percent of the WSA would be retained and opportunities for solitude in the northwest 50 percent of the WSA would he enhanced.	The wilderness values of the WSA would be retained.
Impacts on Big Game Population Levels - Mule Deer	The mule deer population level would increase from a range of 65 to 110 to a range of 70 to 120. The elk population level would increase from a range of 160 to 195 to a range of 175 to 215.	There would be no impact on mule deer or elk population levels.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	Annual labor requirements would increase by 175 hours and costs by $660.	There would be no impacts on livestock management or range project maintenance levels.
Impacts on Recreation ORV Use Levels	Recreational ORV use levels would decline from 500 to zero.	There would be no impacts to recreational ORV use levels.

TERRY BADLANDS

	Proposed-Partial-Alt. 2	No Wilderness	Partial-Alt. 1	All Wilderness
Impacts on Wilderness Values	The naturalness of the portion recommended as suitable would be enhanced due to elimination of recreational ORVC use and motorized vehicle use associated with livestock checking, dispute reductions offsite impacts due to coal mining activity. The wilderness values on 50% of nonsuitable portion would be ddestroyed due to coal mining.	The naturalness would be retained on 85 percent and outstanding opportunities for solitude on approximately 75 percent of the WSA. Wilderness values on 15% of the WSA would be destroyed due to coal mining.	The wilderness values of 14,670 acres recommended as suitable would be slightly enhanced naturalness and solitude due to reductions in motor vehicle use and offsite impacts due to coal mining. The wilderness values on 25% of the nonsuitable portion would be destroyed due to coal mining.	Naturalness and solitude and primitive recreation opportunities would be enhanced due to elimination of most forms of motor vehicle use.
Impacts on Big Game Population Levels - Mule Deer	The population of mule deer would increase to a range of 105 to 175.	The population level of mule deer would remain at a range of 100 to 170.	The population level of mule deer would remain at a range of 100 to 170.	The mule deer population level would increase from a range of 100 to 170 to a range of 110 to 180.
Impacts on Livestock Management and Existing Range Project Maintenance Levels	The checking of livestock and range development maintenance could continue, but at the additional annual expense of $576 and 155 hours labor time.	There would be no impact on livestock or range improvement development levels.	For the portion of the WSA recommended as suitable, additional labor of 20 hours and expenses of $70 annually would be incurred.	Five permittees would together incur annual additional cost of $1,105 and additional labor time of 295 hours.
Impacts on Recreation ORV Use Levels	Recreational ORV use would decline from 400 RVOs to 125 RVOs annually.	Recreational ORV use levels would decline from 400 to 325 RVOs annually.	Recreational ORV use would decline from 400 RVOs to 300 annually.	Recreational ORV use would decline from a level of 400 RVOs, including 15 vehicle dependent RVOs, to zero.
Impacts on Coal Mining Levels	There would be no impacts associated with coal mining levels.	There would be no impacts associated with coal mining levels.	There would be no impacts associated with coal mining levels.	The opportunity to mine coal in the WSA would be foregone.

THREE

THE AFFECTED ENVIRONMENT

REGIONAL DISCUSSION

The first portion of this chapter discusses resource considerations applicable to all 12 WSAs. The second portion is WSA specific.

This Environmental Impact Statement deals with two, more-or-less distinct geographical locales in central and eastern Montana. Eleven of the twelve wilderness study areas (WSAs) lie along the Missouri and Musselshell Rivers in the center of the state, in an area called the Missouri Breaks. The twelfth WSA, Terry Badlands, is about 150 miles south and east of the Missouri Breaks areas, near Terry, Montana.

CLIMATE AND AIR QUALITY

The Missouri Breaks and Terry Badlands both experience the short, warm summers and long, cold winters of the continental type climate. Average precipitation ranges from 10-14 inches annually in both areas, which is in the semiarid range.

Air quality is excellent in both the Missouri Breaks and the Terry Badlands because of the lack of people and industry. All public lands have Class II air quality (good) set by the State of Montana. Particulate concentrations are highest during spring and summer due to farm operations (such as plowing) and lowest in the winter.

TOPOGRAPHY AND GEOLOGY

The Missouri Breaks is part of the Missouri Plateau in the Northern Great Plains, where the Missouri River has cut a canyon 600-800 feet deep. Exposed rock in the Breaks is largely sedimentary shales and sandstone of the Tertiary or Upper Cretaceous Periods, lying over even older sedimentary formations like layers in a cake. (See Figure 3.1.) These nearly horizontal layers of rock were sharply uplifted during the Upper Cretaceous and Tertiary Periods.

The present topography of the Missouri Breaks was formed during the Pleistocene Epoch when the ice sheet that covered the region melted. The Missouri River established a course south of the Bears Paw and Little Rocky Mountains, cutting deeply into the soft shales and sandstone of the area. This formed the numerous, steep hills and deep coulees typical of the Missouri Breaks. Formations in the Missouri Breaks are rich in vertebrate and invertebrate fossils.

The Terry Badlands were formed when the Yellowstone River and its tributaries eroded through parts of the Fort Union Formation of Tertiary Age. (See Figure 3.1.) This WSA has similar characteristics in its river breaks landform to the Missouri Breaks. The bottom lands on the north bank of the Yellowstone River are surrounded by steep, eroded slopes, divided by many deep gullies. The rough hillsides, studded with sandstone bridges, buttes, tabletops, spires and small scoria escarpments, rise to meet rolling benches north of the river.

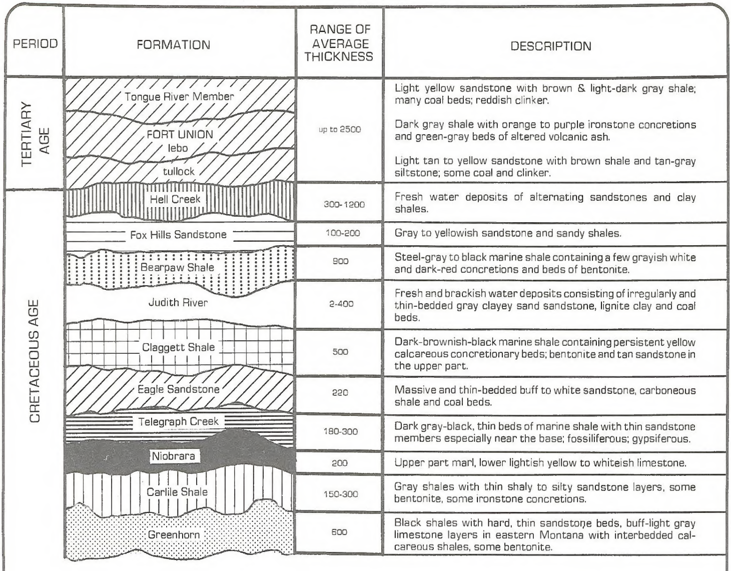
RECREATION

Recreational Uses and Opportunities

Hunting is by far the most popular recreational use in the WSAs, accounting for the most visitor days. The State Comprehensive Outdoor Recreation Plan (Montana Department of Fish, Wildlife and Parks, 1978) indicates the significance of the general area for hunting mule and whitetail deer. The Missouri Breaks are nationally known for the numerous trophy-buck deer and for the abundance of other wildlife. Particularly attractive to hunters is the elk herd in the Burnt Lodge WSA, and the Merriam turkeys found in the Seven Blackfoot WSA. Varmint hunting, mainly for coyotes and prairie dogs, occurs wherever populations permit.

Off-road vehicle (ORV) use occurs in each of the WSAs. Visitors generally come by 4-wheel drive vehicle to hunt, to collect rocks and fossils and to view the scenery. Vehicle ways and tracks along many of the major ridgetops attest to ORV travel. Vehicle use increases substantially during hunting season.

FIGURE 3.1: GEOLOGIC FORMATIONS IN THE WSAs.



PERIOD	FORMATION	RANGE OF AVERAGE THICKNESS	DESCRIPTION
TERTIARY AGE	Tongue River Member	up to 2500	Light yellow sandstone with brown & light-dark gray shale; many coal beds; reddish clinker.
	FORT UNION lebo		Dark gray shale with orange to purple ironstone concretions and green-gray beds of altered volcanic ash.
	tullock		Light tan to yellow sandstone with brown shale and tan-gray siltstone; some coal and clinker.
CRETACEOUS AGE	Hell Creek	300-1200	Fresh water deposits of alternating sandstones and clay shales.
	Fox Hills Sandstone	100-200	Gray to yellowish sandstone and sandy shales.
	Bearpaw Shale	900	Steel-gray to black marine shale containing a few grayish white and dark-red concretions and beds of bentonite.
	Judith River	2-400	Fresh and brackish water deposits consisting of irregularly and thin-bedded gray clayey sand sandstone, lignite clay and coal beds.
	Claggett Shale	500	Dark-brownish-black marine shale containing persistent yellow calcareous concretionary beds; bentonite and tan sandstone in the upper part.
	Eagle Sandstone	220	Massive and thin-bedded buff to white sandstone, carboneous shale and coal beds.
	Telegraph Creek	180-300	Dark gray-black, thin beds of marine shale with thin sandstone members especially near the base; fossiliferous; gypsiferous.
	Niobrara	200	Upper part marl, lower lightish yellow to whiteish limestone.
	Carlile Shale	150-300	Gray shales with thin shaly to silty sandstone layers, some bentonite, some ironstone concretions.
	Greenhorn	600	Black shales with hard, thin sandstone beds, buff-light gray limestone layers in eastern Montana with interbedded calcareous shales, some bentonite.

Source: Eugene S. Perry. Groundwater in Eastern and Central Montana. (Butte, Montana: School of Mines, 1931) p. 12.

Six of the twelve WSAs lie along the Upper Missouri Wild and Scenic River. The portion of the river flowing past these WSAs (from the PN Bridge to the Fred Robinson Bridge) received 651 recorded floaters in 1979 and 610 in 1980. Recreational use of the study areas by floaters is centered in the bottom lands along the river where cottonwood groves provide the best campsites. Visitors occasionally hike into the WSAs but are often discouraged by the steep terrain. The Missouri provides warm water fishing from the shorelines in several WSAs.

Another recreational use in the WSAs is camping, with users entering the WSAs by vehicle, foot or horse. Most camping is associated with other uses such as hunting or river floating and is limited by the lack of potable water.

Other possible recreational uses include cross-country skiing and snowmobiling. Participation in these sports is limited by the difficulty of getting into the WSAs in inclement weather and the fact that comparable locations can be found much closer to population centers.

Projected Visitation Trends in the WSAs

The UL Bend Wilderness Area in the National Wilderness Preservation System is very similar to the wilderness study areas discussed in this EIS. Administered by the U.S. Fish and Wildlife Service (USFWS), this wilderness area approximates BLM's units in ecotype, regional proximity and probable usage.

Before designation, UL Bend saw some vehicle-based visitation by fishermen traveling to Fort Peck Lake and by hunters during the big game season (September through November). Wilderness designation stopped vehicle use and visitation dropped. The USFWS states usage is presently up to pre-designation levels but still very limited. Present users include boaters during the summer months and several hunting parties who pack into the area between September and November.

This visitation pattern could be expected to repeat itself in the 12 WSAs, especially in those units next to the Missouri River. Vehicle-based hunting would be cut off, to be replaced by floater and non-motorized hunters attracted by wilderness designation. From the experience at UL Bend, recreation would return to essentially the same levels as before designation after a short-term drop. The type of users would change as vehicle-based recreationists were replaced by foot or horseback users. People from outside the state would probably be more likely to visit wilderness areas in the Missouri Breaks than they would prior to designation.

The area has already received national recognition through the designation of the Upper Missouri as a wild and scenic river. Figures from 1981 on the Missouri River indicate use at 13,270 visitor days (one visitor for 12 hours), covering both river and bankside use. Approximately 75% of this recreational use was from in-state visitors. Some of these visitors take short hikes into the surrounding lands. Population levels in the six county area have been declining through time. For these reasons it is anticipated that recreational use levels will remain stable through time.

CULTURAL RESOURCES

Information about cultural resources in the WSAs has been collected from reviews of literature, field inventories conducted for the Missouri Breaks Grazing EIS (1978) and BLM's management framework plans. Clearance for range projects and other archaeological fieldwork has also contributed data, providing information about the number, quality and type of prehistoric and historic features present in the WSAs.

Remnants of human occupation dating back 12,000 years are found in the WSAs and the surrounding region. Prehistoric people who frequented the area were hunters and gatherers. They shifted residences in response to seasonal changes in food resource opportunities and the never-ending needs of defense, shelter, water, fuel and raw materials for tool production. These groups were usually small, possessing only what appears to be a limited set of stone, wood and bone tools. Over time bison became a major food source as newer techniques of trapping the animals were developed.

The area along the Missouri River is also historically significant. Many of the WSAs lie along unimpounded sections of the Missouri River, presenting a relatively unspoiled setting with historical remnants. In particular are the deteriorating remains of a number of homesteads from the early part of the Twentieth Century.

WILDLIFE

The abundance and diversity of wildlife in the Missouri Breaks and the Yellowstone River area have been noted since the days of Lewis and Clark. Presently, 60 species of mammals, 233 species of birds, 20 of reptiles and 49 of fish inhabit these areas.

Below is a general description of species commonly found in the Missouri Breaks and the Yellowstone River areas. Detailed species lists can be found in the BLM Miles City and Lewistown District Offices. Appendix 3.1 lists the population densities of wildlife species discussed below.

Big Game

Mule deer are the most abundant and important big game species in the WSAs. All the study areas provide mule deer habitat.

Whitetail deer habitat is confined to places where brush is combined with crop and hay lands along streams. Because of this, whitetails are found mainly in the major drainages along the edges of the units.

Antelope habitat is mainly the open sagebrush-grassland on the edges of WSAs and around them. Here antelope can use their keen sight and speed to advantage.

There have been several transplants of elk in the river breaks habitat since 1951, restoring this animal to an area to which it was once indigenous. The elk population has grown to the point where the herds provide some hunting opportunities.

Bighorn sheep are native to the Missouri and Yellowstone River drainages. There are recommendations to reintroduce this animal in the Terry Badlands WSA. Twenty-seven bighorn sheep were planted at Chimney Bend on the south side of the Missouri in 1979. This herd has since split, some crossing the river and establishing a new herd on the north side, west of the Ervin Ridge WSA. There are no resident herds in any of the WSAs.

Upland Game Birds

Sage grouse are found in the study areas in the same habitat preferred by antelope — the sagebrush-grasslands. Sage grouse usually nest in sagebrush within 2 miles of their mating grounds. Sharp-tailed grouse are distributed throughout the WSAs where perennial grass and brush coulees join, using the grass for roosting, nesting and feeding.

Pheasants and Hungarian (gray) partridge inhabit areas associated with agricultural lands outside the WSAs. Partridge also use the drier sites found on the edges of the units.

Merriam's turkeys were planted in the Missouri Breaks in 1957. The lack of deciduous shrubs for winter habitat and food has limited their range to farms and feedlots outside of the WSAs. The Seven Blackfoot WSA currently has a population capable of supporting hunting.

Waterfowl

Canada geese, shorebirds and a large variety of ducks use the Missouri River (which forms the boundary of six of the WSAs) for nesting and as a migration stopover. They also use reservoirs inside the units. Common shorebirds in the area are the killdeer and avocet, while duck species include the mallard, pintail, gadwall and blue-winged teal.

Fur-bearing Mammals

The following fur-bearers are found in the study areas: muskrats, beaver, badgers, bobcats, raccoons and foxes. Populations and habitat areas have not been determined.

Predators

Coyotes are the most common predator in the WSAs. Other predators found in the WSAs are skunks and weasels.

Nongame Species

The available surveys for the WSAs place the number of nongame birds at more than 130 species and show 30 species of mammals and 13 reptile species. Lists of these species are available in the BLM Miles City and Lewistown District Offices.

Fisheries

Several reservoirs in the WSAs provide trout and bass fishing. There are no perennial streams in any of the WSAs. The Montana Department of Fish, Wildlife and Parks (MDFWP) and the U.S. Fish and Wildlife Service have classified Bullwacker Creek, Cow Creek and Timber Creek as moderate-value fishery resources, while the Missouri and Yellowstone Rivers are highly rated fishery resources. Game fish species in these rivers are sauger, catfish, paddlefish and walleye. The Musselshell River is a high-priority fishery resource (USFWS 1980).

Threatened or Endangered Animals

Wintering bald eagles on the Missouri River are the only federally listed recognized threatened or endangered animal species occurring in the WSAs, although there are no resident populations in any of the WSAs.

SOILS AND WATERSHED

The soils of the WSAs are developed mainly from sedimentary bedrock and mixed-rock alluvium on river breaks topography. Valley walls rise abruptly above the narrow floodplains and ridgetops are cut by many drainages. This topooraphy is extremely erodable and surface runoff is very rapid, so large amounts of sediment are being washed away. Parent materials consist of shales, siltstones and sandstones of the Bearpaw, Judith River, Claggett and Eagle Sandstone Formations. (See Figure 3.1.)

Clayey soils are shallow to moderately deep and generally well drained. Where high sandstone ridges occur, the soils are generally moderately deep with sandy and loamy textures. Deep soils occur as alluvial deposits along drainages.

Soil mapping units can be found in Appendix 3.2 for each WSA. A detailed description of the soil mapping units and soil series descriptions can be obtained from BLM or from U.S. Soil Conservation Service offices in each of the six counties.

With the exception of the Missouri, Musselshell and Yellowstone Rivers (which form the boundaries of some of the WSAs), all of the streams in the study areas are ephemeral: coulees flowing during spring runoff and for short periods following storms. These high-volume, short-period flows carry large amounts of sediment from the highly erosive watersheds.

The occurrence of ground water is discussed in BLM's Missouri Breaks Grazing EIS. Groundwater in the form of springs is uncommon in the WSAs.

VEGETATION

Vegetation in the units falls into three general vegetation types as discussed by Ross and Hunter (1976). The Dog Creek South, Stafford, Woodhawk, Ervin Ridge, Cow Creek and Antelope Creek WSAs are in the Western Sedimentary Plains (10-14 inch precipitation zone, river breaks range site). The most common plants here (in order of dominance) are ponderosa pine, Rocky Mountain juniper, Douglas fir (on north slopes), bluebunch, western and thickspike wheatgrass, green needlegrass, prairie sandreed, basin wildrye, needle and thread, greasewood, big sagebrush, creeping juniper, native legumes and prairie Junegrass. (See Appendix 3.3 for the scientific names of these plants.)

The Musselshell Breaks, Bridge Coulee, Burnt Lodge, Billy Creek and Seven Blackfoot WSAs are in the Eastern Sedimentary Plains (10-14 inch precipitation zone, river breaks range site). The Musselshell Breaks and Bridge Coulee are on the Musselshell River while the others lie in the river breaks along the Fort Peck Reservoir. In addition to the plants mentioned above, the dominant plants in this vegetation type include little bluestem, nuttall saltbush, shadscale, saltbush and native legumes (Appendix 3.3).

The Terry Badlands are in the Eastern Sedimentary Plains (10-14 inch precipitation zone, badlands range site). The most common plants (besides those mentioned above) are little bluestem, alkali sacaton, American vetch, plains muhly, sideoats grama, juniper and a stand of limber pine, one of the most easterly stands.

Threatened or Endangered Plants

There are no federally listed recognized threatened or endangered plant species in the WSAs. The only sensitive plant which could occur is the persistent sepal yellowcress.

Noxious and Poisonous Plants

Several noxious plants may be found in the study areas. Presently there are no concentrations being controlled, but Canada thistle, leafy spurge, dalmation toadflax, field bindweed and Russian knapweed could occur in the some of the WSAs.

Plants poisonous to livestock are also found in the WSAs but have not posed any major problems to date. These species are: low larkspur, white pointloco, deathcamas, cocklebur, ponderosa pine, greasewood, milk vetch, water hemlock, poison hemlock, halogeton and chokecherry. Some of these are only poisonous in certain seasons or under certain conditions.

Timber

Due to the lack of commercial-quality timber and the erodability of the soils, there has been no commercial lumbering in the WSAs. However, post cutting permits have been issued in the past in the southwest corner of the Bridge Coulee WSA and in isolated spots in the Seven Blackfoot WSA where there have been fires. Fifty to one hundred posts were cut in the Seven Blackfoot WSA for local rancher use before cutting was suspended in July 1975 when a primitive area study was initiated.

Fire Suppression

Bureau of Land Management fire suppression has attempted to keep damage from wildfires as slight as possible by using retardant drops, helitack crews, ground pumpers and fire crews. A fire management plan for the entire Missouri Breaks ecosystem in the future will establish criteria for modified or limited suppression areas. This plan would allow fires to burn in designated wilderness under supervision, if the fire weren't endangering life, property or resource values.

Recent fires have burned parts of the Woodhawk, Bridge Coulee, Seven Blackfoot and Burnt Lodge WSAs. Grasses in these areas have revegetated but timber is returning very slowly.

MINERALS

This section contains a general overview of minerals for the 12 WSAs. Site specific mineral treatments are in the second (WSA specific) portion of this chapter.

A general description of the geology of the Missouri Breaks and Terry Badlands areas can be found in the "Topography and Geology" Section of this chapter.

The six wilderness study areas south of the Bears Paw Mountains along the Missouri River (Dog Creek South, Stafford, Ervin Ridge, Woodhawk, Cow Creek and Antelope Creek) share similar geologic structure which could make the area a valuable source of petroleum reserves, particularly natural gas. The youngest geologic formations are shales, sandstone and siltstone formed when eastern Montana was periodically flooded by shallow seas in Cretaceous times. The areas gradually retreated eastward, leaving deposits of fine-grained clays and silt which became the Telegraph Creek, Claggett Shale and Bearpaw Shale Formations. (See Figure 3.1.) Sandy and silty, brackish to fresh water sediments were left on Cretaceous-age beaches and coastal plains, becoming the Eagle Sandstone and Judith River Formations.

The folding of the earth's surface, resulting in the Bears Paw Mountains north of the Missouri River, caused intense thrust faulting elsewhere in the area. Formations slid away from the Bears Paw uplift along incompetent beds (probably bentonite). All of the WSAs near the Bears Paw Mountains contain evidence of this activity in the form of gravity-glide faults.

The Bears Paw uplift is a focal point of petroleum exploration because the shifting of formations trapped pockets of natural gas at depths of 1,500-2,000 feet, particularly in the Eagle Sandstone Formation and occasionally in the Judith River and Telegraph Creek Formations. According to the Fuel Resource Development Company (Fuelco), 4.8 billion cubic feet (BCF) of natural gas have been extracted as of December 1983 from the 39 wells in the area that form the Leroy Natural Gas Field. Twenty-four were producing as of May 1984. The company projects another 35-40 successful wells could be drilled in the 500-square miles around the Missouri River (from the PN Bridge to the Fred Robinson Bridge), producing perhaps an additional 10-16 BCF. Rice (1980) felt this field may even be as rich as the Tiger Ridge Field north of Havre, which has reserves currently estimated at 735 BCF.

There is also a possibility that more natural gas is trapped in formations below the Telegraph Creek, as it is in the Bowdoin Dome Field northeast of the Missouri Breaks. In that field, gas is drawn from the Greenhorn and Carlile Shale Formations. (See Figure 3.1.) Few wells in the Bears Paw area have been drilled deeper than 1,800 feet: the common practice is to terminate bores in the uppermost Niobrara Formation, 100-750 feet above the producing parts of the Greenhorn.

Industry sources also indicate a potential for oil discoveries in the Missouri Breaks because of its geologic structure. It's suspected that if oil were found, it would be very deep in formations of Jurassic Age or older. There have been no oil discoveries in or next to any of the six WSAs, and there is no known oil drilling presently in the area. For this reason, oil potential in the WSAs along the Missouri River is rated low to moderate.

The Missouri Breaks area also contains coal deposits. In general the Judith River Formation contains two beds of lignite (subbituminous coal), ranging from 0.6-2.5 feet thick in the area of the Fred Robinson Bridge. There are also deposits in the Eagle Sandstone Formation. A recent mineral survey conducted by the U.S. Geological Survey (USGS) and the Bureau of Mines (USBM) in the Charles M. Russell National Wildlife Refuge (CMR) estimated reserves of 190 million tons of coal in the Fred Robinson Bridge area, 13% of which is covered by less than 200 feet of overburden. Limited mining in the past has taken place in the area to meet the local needs of communities and ranches. The most productive of these underground mines was the Russell Mine that fed the Phillips Power Plant from 1914-1924. Two hundred thousand tons of coal were taken from it during the decade it was in operation (Erdman, Tempke 1963). All of the mines in the area were out of production by the 1930s and coal currently isn't being mined in the four WSAs along the Missouri.

Bentonite can also be found in the Bearpaw Shale and Claggett Shale Formations in the six WSAs.

However, there is doubt that the bentonite in these WSAs is of good enough quality to meet BLM's definition of a "locatable" mineral (i.e. a barrel yield greater than or equal to 80 with a water loss less than or equal to 17 milliliters).

The six other wilderness study areas in this EIS lie further east and southeast around the Fort Peck Reservoir and along the Musselshell and Yellowstone Rivers. (See Figure 1.1.) Of these five WSAs, Bridge Coulee, Musselshell Breaks, Billy Creek, Seven Blackfoot and Burnt Lodge share similar geology. The Bearpaw Shale Formation occurs in portions of the WSAs where streams have cut through younger sandstones and mudstones of the Fox Hills and Hell Creek Formations. (See Figure 3.1.) These formations were deposited as the late Cretaceous Sea (which formed the Bearpaw Shale Formation) retreated eastward across Montana and was replaced by beach (Fox Hills) and river-deposited sediments (Hell Creek Formation). In the Seven Blackfoot and Burnt Lodge WSAs, the yellowish Tullock Member of the Fort Union Formation caps the upper rim of the river breaks.

The younger, Tertiary sediments of the Fort Union Formation make up the geology of the Terry Badlands WSA. These layers were deposited in riverbeds, swamps and delta plains and include the yellowish rocks of the lowermost Tullock Member, the dark, shale badlands of the middle Lebo Member and the light tan sandstone and red clinker-capped buttes and rolling plains of the upper Tongue River Member. (See Figure 3.1.)

Major natural gas reserves may be trapped in the Judith River and Eagle Sandstone Formations and in the Mosby Member of the Greenhorn Formation, as is common further west (Rice and Shurr 1980). Wells would have to be drilled deeper than in the western Missouri Breaks area, and the daily flow rates of this resource may be low. Still, widespread distribution of the gas could make it economical to extract.

The proximity of the Cat Creek Oil Field influences the petroleum potential rating of the Musselshell Breaks WSA. This field, one of the oldest in Montana, has produced since 1920 nearly 23 million barrels of oil from Cretaceous-age and older formations. Production has dropped greatly since the mid-20s, the field being in the "stripper state" since 1958, but still produced 89,000 barrels from 58 wells in 1979.

Coal has been noted in the Tullock, Lebo and Tongue River Members of the Fort Union Formation, especially in the Terry Badlands WSA.

No known geothermal resources have been identified or designated in any of the study areas.

ECONOMIC CONDITIONS

Ranch-Related Economic Conditions

At the end of 1978 there were 3,020 ranches and farms in the six affected counties (Census of Agriculture, USDC, 1980). Currently 42 individual ranch operations have permits to graze in the WSAs. There is also one grazing association using the study areas. This association has 25 members, 3 of which currently use parts of the WSA. Four ranches and the grazing association have land in more than one WSA. The 40 ranch operations with BLM permits comprise approximately 1.4% of the ranches in the affected counties. The proportion is highest in Garfield County with 6% of its ranches being affected.

The dependency of a ranch operation is the percentage of total AUM needs that are in the WSAs. The dependency of ranch operations on WSA forage is determined by a combination of several factors: the percentage of total required forage that WSA lands provide, the seasons the forage is available and the availability of substitutes for the forage, with the former being the primary indicator. Although there are a few operations raising sheep and yearlings, the predominant type of ranch is a cow/calf operation. Where sheep or yearlings are involved, the total number has been converted to equivalent cow units. There is considerable variation among operators with respect to dependency. Dependency is approximately the percentage of the AUMs associated with the operations that are in a WSA. Approximately 43% have less than 6% of the AUMs associated with their operation in WSAs. Twenty-five percent have between 7% and 15% of their AUMs in WSAs. Approximately one-third have between 16% and 41% of their AUMs in WSAs.

Ranch net income is the difference between total revenues (associated with cattle sales) and total costs. Costs include a multitude of items, but generally are associated with land, feed, equipment, services, and labor. The total number of families dependent upon net ranch income for their sole livelihood is difficult to determine. Almost all the ranches are family owned, owner-operated having been in the family for several generations. About half have more than one family associated with the ranch. Some operations derive most of their income from farming, with substantial cash crops (primarily wheat) being raised on about half of the operations. About 25% of the ranchers have an additional source of income outside the ranch or farm.

Although BLM does not recognize the right of the permittee to treat grazing permits as real property, in practice the permit does have worth for borrowing money and adding value to the property at the time of sale. These values could be affected by a change in land status, such as wilderness designation.

County Employment and Earnings

Data for 1974 and 1979 show agriculture and government to be the main sources of employment in the affected counties. Total employment decreased in all but Blaine and Fergus Counties during this period while proprietary and wage and salary agricultural employment showed substantial decreases in every county. These agricultural losses reflect similar statewide and national trends due to decreases in the number of farms and ranches and increasing mechanization (Abt 1980a). During this same time period, total state employment increased by 12.5%.

In 1974 agriculture and government were the major sources of earnings, with retail trade and services contributing the next largest portions. Agriculture earnings decreased substantially by 1979 and in two counties registered a loss. Total earnings between 1974 and 1979 increased in three counties: Phillips, Fergus and Petroleum and decreased in all others. The large decreases in agriculture offset the gains made in most other sectors in each affected county. These figures are compared to a statewide increase of 53.5% during the same period.

Oil and Gas Related Employment and Taxation in the Counties With WSAs

Since there are no producing oil or natural gas wells in any WSAs, this discussion is based on neighboring wells. It is assumed that if development were to occur, it would be similar to that in present fields and generate comparable employment and tax revenue.

Only the property and severance taxes that are returned directly to the counties are examined. Production from the Leroy Natural Gas Field represents less than 2% of the state's total, however, it contributed almost 4% of Blaine County's property taxes from 1979-1981. The Cat Creek Oil Field produces less than .3% of the state's total and contributed 2.5-5% of the property taxes for Petroleum County from 1979-1981.

The severance tax return occurs only if county production increases from the previous year. Neither Blaine (for natural gas) nor Garfield County (for oil) has received a return from this source in the 2 years it has been available.

Due to conflicting data from county business patterns, industry and the Bureau of Economic Analysis, it is difficult to estimate petroleum-related employment figures at the county level. Producing fields such as the Leroy or Cat Creek offer little or no local employment. Although exploration and development can provide substantial numbers of jobs, many of these jobs are filled by transient workers rather than the local labor force.

WILDERNESS DIVERSITY

All 12 wilderness study areas are in the Great Plains Shortgrass Prairie Ecoregion (3110) (subgroup grama/needlegrass/wheatgrass — 057, according to the Baily-Kuchler System (see Glossary). UL Bend, a 20,893-acre area managed by the U.S. Fish and Wildlife Service (USFWS), is presently the only representative of this ecotype subgroup in the National Wilderness Preservation System (NWPS). Fifteen WSAs in the Charles M. Russell National Wildlife Refuge, totaling 161,480 acres, are also in the 057 subgroup. These study areas have been endorsed by the President and are awaiting Congressional action. One BLM WSA in the Butte District is also included in this ecotype/landform type.

WILDERNESS STUDY AREA SPECIFIC DISCUSSION

The following discussion is WSA specific.

DOG CREEK SOUTH WSA

The Dog Creek South Wilderness Study Area consists of about 5,150 acres of public lands on the south side of the Missouri River in Fergus County. Three thousand nine hundred and two acres are in the Upper Missouri Wild and Scenic Corridor, 2101 acres being in the "Recreational" Section while 1,801 acres are in the "Wild" portion. The WSA boundary on the north is the river's edge, on the south a maintained road and elsewhere on property ownership lines not easily discernable on the ground (Figure 3.2).

WILDERNESS VALUES

Naturalness

Table 3.1 lists the manmade features in this WSA. They are mostly scattered and well screened but a vehicle way is an exception. Traversing the northern end of the unit for about 4.75 miles, this way is easily visible from near the river and from the ridgetops. Although the way is revegetating in places through lack of use, it is a major infringement on the naturalness of the WSA's northern end. Mechanical rehabilitation would probably create more damage than if the way were allowed to revegetate over time.

The other manmade features are mostly associated with livestock grazing. Because of the location of most manmade features, boundary modifications would not significantly increase the apparent naturalness of this study area.

Solitude and Primitive Recreation

The WSA is fairly compact, about 5 miles long and 1-3 miles wide. Drainages of intermittent streams are extremely steep and are separated by narrow, barren ridges. Dog Creek South contains very little screening vegetation but topographic screening is abundant due to the rugged river breaks topography. Since steep slopes run from the overlooking ridges down to the river, wilderness users would probably be channeled to a few areas along the Missouri; to isolated pockets between minor drainages or along flat ridgetops.

The drainages to the north and west drop directly towards the PN Ranch at the mouth of Dog Creek and towards other ranches north of the river. Developments within a few hundred yards of the WSA's edge adversely

FIGURE 3.2 DOG CREEK SOUTH (MT-068-244) LAND STATUS/ALLOTMENT BOUNDARY MAP

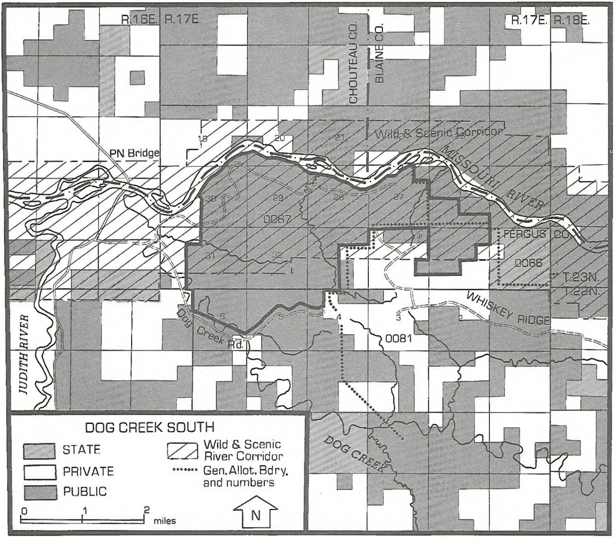

R.16E.
R.17E.
CHOUTEAU CO.
BLAINE CO.
R.17E.
R.18E.
Wild & Scenic Corridor
PN Bridge
MISSOURI
RIVER
19
20
21
30
29
28
27
0067
31
32
FERGUS CO.
0066
T.23N.
T.22N.
WHISKEY RIDGE
6
5
4
3
2
0081
Dog Creek Rd.
JUDITH RIVER
DOG CREEK
DOG CREEK SOUTH
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
Gen. Allot. Bdry. and numbers
0
1
2
miles
N

TABLE 3.1: MANMADE FEATURES IN THE DOG CREEK SOUTH WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 22 N., R. 17 E. Sec. 5	Off Dog Creek	1 Acre	On maintained road which forms part of south boundary.
2	T. 22 N., R. 17 E. Sec. 4	South edge of unit	1 Acre	Located in a grassy swale - visible from rises surrounding the reservoir.
3	T. 23 N., R. 17 E. Sec. 33	Center of unit	1 Acre	Well screened reservoir hidden in a side drainage.
4	T. 23 N., R. 17 E. Sec. 32	Center of unit	1 Acre	Located high in drainage, well screened.
Vehicle Ways				
1	T. 23 N., R. 17 E. Sec. 27	End of vehicle trail heading north of Whiskey Ridge	.25 Mile	Dirt two track to edge of ridge.
2	T. 23 N., R. 17 E. Sec. 27	Connects with same road as above vehicle trail	.25 Mile	Dirt two track.
3	T. 23 N., R. 17 E. Secs. 27, 28, 29, & 30	Follows river side irregularly	4.75 Miles	Recently graded trail following the general alignment of an earlier trail.
4	T. 23 N., R. 17 E. Secs. 28 & 29	Leads to south from above vehicle trail	.5 Mile	Almost nonexistent two track.
Fences				
1	T. 23 N., R. 17 E. Sec. 27	Upstream of Iron City Islands heading inland from river	.5 Mile	Follows up the side of a drainage to a deep side coulee. Green steel and wood posts.
2	T. 22 N., R. 17 E. Secs. 4 & 5	South edge along south boundary road	1 Mile	Drift fence; wood posts; mostly located along south boundary road.

Source: BLM, 1981, 1986

influence solitude because of the dust, noise, reflections of moving vehicles and people. Extensive farming operations are also readily visible from the WSA, being from 400 yards to 1/2 mile from much of the unit. Throughout the spring, summer and fall, farm vehicles are regularly used on adjacent fields.

Motorized traffic down the river and road traffic on Highway 236 and the PN Bridge across the Missouri further infringe on solitude, adversely affecting approximately 2,000 acres on the north and west sides of the WSA. True solitude is available only in the center and eastern portions of the unit.

All of the WSAs in the Missouri River Breaks are in the Air Force's Hays Military Operations Area, a National Guard tactical jet fighter training zone. Eight aircraft are scheduled to fly through the area every day at 4,000 feet, so periodic disruptions of solitude throughout the WSA should be expected.

Overall, solitude in this unit is seriously affected by continuing agricultural operations adjacent to the northern and western parts of Dog Creek South and outstanding opportunities are limited to isolated drainages in the center of the WSA.

The location on the Missouri River contributes to the primitive recreation opportunities in this WSA; fishing from the shore, waterfowl hunting and camping are all possible. Other possible recreational uses include hiking, horseback riding, nature study and photography. Present uses are limited to sightseeing (by vehicle), hunting for mule deer and camping along the river. The nearness to Highway 236 traffic and farm-ranch operations in this general area makes the river campsites less desirable than other locations along the Missouri. Some camping sites can be found on the long ridges inside the unit, although the lack of trees and water make camping there less attractive. Like the other WSAs near the Missouri, Dog Creek South provides good hunting. Possible detriments to hunting are restricted access through private lands, the difficulty of retrieving game and fluctuating game populations.

The area is remote from population centers and inaccessible in wet or snowy weather. The user season would be from May-October, in dry conditions only. Physical hazards to visitors in the area include rattlesnakes, steep terrain, lack of drinking water and the difficulty of travel in wet weather. The lack of forest vegetation, outside distractions, the channeling of visitors into the deep drainages, narrow, long ridge lines, and the small size of this WSA all mean the Dog Creek South WSA does not offer outstanding opportunities for wilderness recreation.

Supplemental Features

The study area has striking vertical, heavily-eroded scenery, a notable attribute. Most slopes are open clay, with prairie vegetation on the ridgetops. There are very few trees.

The WSA contains a remnant from the homesteading era and is next to the PN Ranch, which is important to the history of the area.

MINERALS

Dog Creek South contains no known geologic structures (KGSs). KGSs are a strong indicator of oil and gas potential. Only one dry wildcat well has been drilled in the vicinity. The proximity of this WSA to the Leroy Natural Gas Field (3 miles to the northeast) and its similar geologic structure to the Leroy and Sherrard Fields cause it to be rated high for natural gas potential. Oil potential is rated low to moderate, as there have been no discoveries to date in the area, although it is structurally possible. Approximately 15 percent (780 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

Samples from four mines that took coal from the Judith River Formation near Dog Creek averaged 46.9 percent fixed carbon, 36.7 percent volatiles and produced 10,515 BTU/lb. (Hubbard 1963). Samples from two mines near the WSA that dug coal from the Eagle Sandstone Formation averaged roughly the same: 47.8 percent fixed carbon, 38.5 percent volatiles, producing 10,845 BTU/lb. (Hubbard 1963). Both samples were considerably degraded by bone or shale partings and high moisture content. Sulphur measurements were not made at the time but BLM planning documents describe the coal from both formations as having high sulphur content (BLM, *Fergus Planning Unit URA*, 1977).

With the present standards of the Clean Air Act and technology, the potential of coal in the Dog Creek South WSA becoming commercially attractive is low, even though it is part of the Lewistown Coal Field. The low heating value and poor storage characteristics render the Judith River beds undesirable beyond the use of local residents (Erdman and Lemke 1963). The coal is poorly accessible, in comparatively small, thin layers with probable high sulphur content.

Bentonite beds in the Dog Creek South WSA are too thin and the mineral of too poor quality to be commercially feasible.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 20 and 80. The mule deer population uses the area primarily in spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. Approximately 25 sage and sharp-tailed grouse use the area. There are no known leks in the WSA. There are no fisheries reservoirs and all drainages are intermittent. (Appendix 3.1.)

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently three operators with grazing permits in the WSA. These operators have 545 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.2 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 150 RVDs per year. Of this use, it is estimated that five RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

STAFFORD WSA

The 4,800-acre Stafford WSA is just north of the Missouri River between the PN Bridge and Stafford Ferry in Chouteau and Blaine Counties. Of this unit, 4,346 acres are in the Upper Missouri Wild and Scenic River Management Corridor: 425 acres in the "Scenic" Section, 113 acres in the "Recreational" and 3,808 acres in the "Wild" parts of the study area are bounded by the Birch Creek Ridge Road, the Boiler Bottom vehicle way, Montana State land, recently acquired public lands, the Missouri River and private lands (Figure 3.3.)

WILDERNESS VALUES

Naturalness

Stafford's rugged terrain has limited human imprints, which helps retain the WSA's natural appearance. Developments are few and scattered, lying primarily on the periphery of the WSA (see Table 3.2). The manmade features are generally associated with livestock grazing and are being substantially unnoticeable. Because of their location, boundary modifications would not significantly increase the apparent naturalness of this WSA.

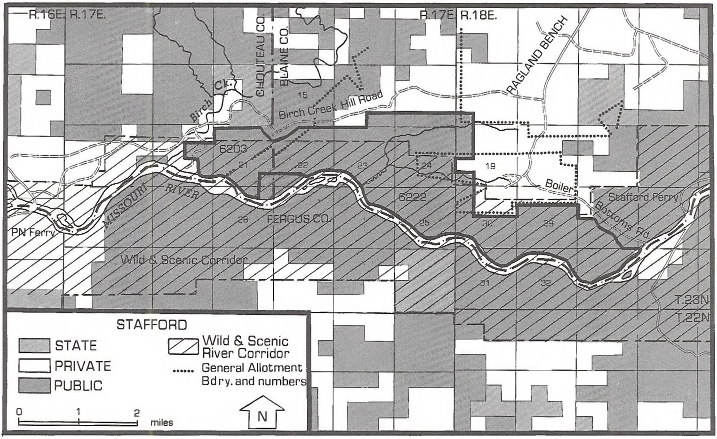
Solitude and Primitive Recreation

The Stafford WSA is long and narrow, stretching 8 miles in length and 1/2-1½ miles in width. It is found in a rugged portion of the Missouri Breaks, with steep and highly dissected coulees that are often sparsely vegetated. Where slopes and soils permit, vegetation is composed of prairie grasses, sagebrush and juniper. Patches of cottonwoods parallel the river and juniper and pine grow in a few isolated groves.

Since the unit has very few tall plants, there is very little screening from vegetation. However, topographic screening is abundant. Steep slopes running down from the ridges overlooking the river would probably channel wilderness users into a few areas along the Missouri, to isolated pockets between minor drainages or along flat ridgetops. This decreases the opportunities for solitude in some portions of the WSA.

The opportunity for solitude is also affected by the adjacent homes, vehicle use along surrounding roads, boat

FIGURE 3.3 STAFFORD (MT-066-250) LAND STATUS/ALLOTMENT BOUNDARY MAP



R.16E. R.17E.
R.17E. R.18E.
CHOUTEAU CO.
BLAINE CO.
RAGLAND BENCH
Birch Ck.
15
Birch Creek Hill Road
6203
21
22
23
24
19
Boiler
Stafford Ferry
Bottoms Rd.
6222
MISSOURI RIVER
28
FERGUS CO.
25
30
29
PN Ferry
Wild & Scenic Corridor
31
32
T.23N.
T.22N.
STAFFORD
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
General Allotment Bdry. and numbers
0
1
2
miles
N

TABLE 3.2: MANMADE FEATURES IN THE STAFFORD WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoir				
1	T. 23 N., R. 18 E. Sec. 29	East edge	1 Acre	Off a vehicle way and within a narrow drainage.
Vehicle Ways				
1	T. 23 N., R. 17 E. Sec. 20	West edge	.50 Mile	An alternate access to private farmland when main access is washed out. Shows signs of construction but minimal use.
2	T. 23 N., R. 17 E. Sec. 21	Northwest side	.50 Mile	Unconstructed ridge trail that leads from Birch Creek Road.
3	T. 23 N., R. 17 E. Sec. 21	Northwest edge	.25 Mile	Unconstructed two wheel track that follows ridge. Shows minimal use.
4	T. 23 N., R. 17 E. Sec. 22	North edge	.25 Mile	Unconstructed two wheel track that leads to fence. Shows very little use.
5	T. 23 N., R. 18 E. Sec. 29	Northeast edge	.75 Mile	Unconstructed two wheel track that leads to a reservoir. Shows very little use.
6	T. 23 N., R. 17 E. Sec. 20 & 21	Southwest edge	1 Mile	Access along River. Signs of construction, but no maintenance and minimal use.
7	T. 23 N., R. 18 E. Sec. 30	Northeast edge	.25 Mile	Unconstructed vehicle way that leads to a reservoir. Very little use.
Fences				
1	T. 23 N., R. 17 E. Sec. 20	West edge	.5 Mile	Boundary fence that has a primitive appearance.
2	T. 23 N., R. 17 E. Sec. 21	Southwest edge	.5 Mile	Boundary fence that has a primitive appearance.
3	T. 23 N., R. 17 E. Secs. 15, 22, & 23	North edge	1.25 Miles	Boundary fence that follows a ridge line.
4	T. 23 N., R. 17 E. Secs. 28 & 29	Northeast edge	2.25 Miles	Lies along the overlooking ridges and unit's boundary.

Source: BLM, 1981, 1986

travel on the river and by four farm-ranch operations next to the WSA. Three ranches lie along the northern border (T. 23 N., R. 17 E., Sections 13 and 19) while the other is on the opposite side of the Missouri at the southeast end of the unit (T. 23 N., R. 18 E., Section 18). It is currently vacant. Fields are farmed up to the WSA boundary in the northeast end and other farming operations are within 3/4 of a mile of the study area. Farm equipment is occasionally visible and audible during the main recreational season of May-October. The operation in Section 13 has an aircraft runway and the operators regularly fly over the WSA.

The Stafford WSA is also part of a National Guard tactical jet fighter training zone, with eight aircraft every day scheduled to fly over at 4,000 feet. Periodic disruptions of solitude should be expected throughout the study area.

The county road to the Stafford Ferry, immediately across the river from the east end of the Stafford WSA, is regularly used during the summer. A hayfield and homesite are also just across from the east end of Stafford, with the sight and sound of the irrigation system of the former present throughout the summer growing season. Solitude in the west end of Stafford is reduced by the nearby farming operations and PN Bridge traffic. The use of the newly completed bridge and the associated highway will increase. More traffic will also travel on the Birch Creek Road which forms part of the north boundary of the WSA. These offsite impacts are well within both the sight and sound zone of 25 percent of the Stafford WSA.

Typical recreational opportunities in the unit include horseback riding, hunting, hiking, sightseeing, photography and fishing from the riverbank. Hunting is presently the biggest use, usually from vehicles traveling along the ridgetops of the north boundary. Travelers along the Upper Missouri Wild and Scenic River can find limited campsites along the shorelines of the study area, and can hike the coulees or enjoy the area's scenery.

Although there are some opportunities for primitive recreation, use is limited in various ways. The steep terrain channels use along the river or the finger ridges, while the lack of screening vegetation limits campsites to the few scattered groves of trees along the river. Rattlesnakes, the lack of water and the difficulty of travel during wet weather present hazards to the wilderness user.

Supplemental Values

This WSA contains features of scenic and historical value. Steep coulees and clay cliffs offer stark contrast to the Missouri River. Evidences of the use of the area by Indians and homesteaders can be found in the study area and an old wagon road forms its eastern border.

MINERALS

The Stafford WSA is next to the western edge of the Leroy Field gas field and there is also a producing natural gas well 3 miles to the east. For these reasons Stafford has a high potential to produce natural gas. Oil potential is rated low to moderate because of the lack of discoveries, even though it is structurally possible. Approximately 5 percent (260 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The Stafford WSA is part of the North Central coal field and USGS has classified 320 acres of it as coal lands. Coal was extracted in the vicinity during the 1920s from the John McCellan Mine, 3½ miles northeast. It produced subbituminous coal from a bed in the Judith River Formation 5¾ feet thick with 19-inch shale partings. A sample of this coal tested as 13.1 percent ash, producing 10,950 BTU/lb, roughly comparable to the samples taken from the mines near Dog Creek. The coal in this WSA is of high moisture content, low heating value, probable high sulphur content, poor storage characteristics, thin beds and generally inaccessible. For these reasons, coal potential in the Stafford WSA is rated low.

Bentonite potential is low because the beds are usually too thin and of poor quality to be commercially attractive.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 20 and 90. The mule deer population uses the area primarily in spring, summer, and fall as general1habitat. There are no high valued year long or severe winter concentration areas. As many as 15 grouse may occupy the area. There are no known leks in the WSA. There are no fisheries reservoirs and all drainages are intermittent. (Appendix 3.1.)

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are two operators with grazing permits in the WSA. These operators have 195 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.3 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 75 RVDs per year. Of this use, it is estimated that no RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

ERVIN RIDGE WSA

This 10,200-acre unit is just north of the Missouri River, 10 miles east of the Stafford (McCellan) Ferry crossing. Five thousand and sixty-one acres are in the "Wild" section of the Upper Missouri Wild and Scenic River Management Corridor.

The southern boundary is the Missouri River while the northern border is formed by the Lone Tree-Ervin Ridge Road. The rest of the unit is bounded by the Barnard Ridge Road, public lands, private land and Montana State land (Figure 3.4.)

WILDERNESS VALUES

Naturalness

The WSA's rugged terrain has confined most of the developments to ridgetops or near access routes, affecting areas lying near the border or along the cherry-stemmed roads. The eastern half of the WSA, coulee bottoms, areas below the ridge lines and along the river appear natural.

The few manmade features inside the unit are primarily associated with livestock grazing. (see Table 3.3.) Vehicle ways following ridges, with their primary use for seasonal hunting or sightseeing, would revegetate naturally through lack of use. Boundary modification would not significantly increase this WSA's apparent naturalness, due to the scattered location of developments.

Solitude and Primitive Recreation

This WSA is irregularly shaped, being about 10 miles long and 1/4-2¾ miles wide. The rugged topography of steep and highly eroded ridge lines tapers to narrow edges before dropping to the river. The terrain provides solitude but the steep slopes also channel visitors along the Missouri and to the ridgetops. Where slopes and soils allow, the vegetation cover is predominantly short prairie grasses and sagebrush, while 20% of the area has groves of ponderosa and lodgepole pine, juniper and Douglas fir. An occasional cottonwood is found along the river. Vegetation growing along drainages and on some ridgetops provides some screening, primarily in the eastern half of the unit.

Solitude in certain parts of this WSA is reduced by the configuration, outside impacts and by the two cherry-stemmed roads. The wilderness user is never more than a mile from the boundary. Farming, vehicle traffic on the boundary and cherry-stemmed roads and activities around three homesites near the west side are distracting. On the Barnard and Pendell Ridges, intensive wheat farming borders the WSA, while farming operations across the river can be seen from ridgetops. Motorized traffic on the Missouri River, while slight, is a further infringement on solitude. The best opportunity for solitude is in the southeastern part of the WSA.

This unit within a National Guard tactical jet fighter training zone, where up to eight aircraft daily are scheduled to fly at 4,000 feet. Periodic disruptions of solitude throughout the unit should be expected.

FIGURE 3.4 ERVIN RIDGE (MT-068-253) LAND STATUS/ALLOTMENT BOUNDARY MAP

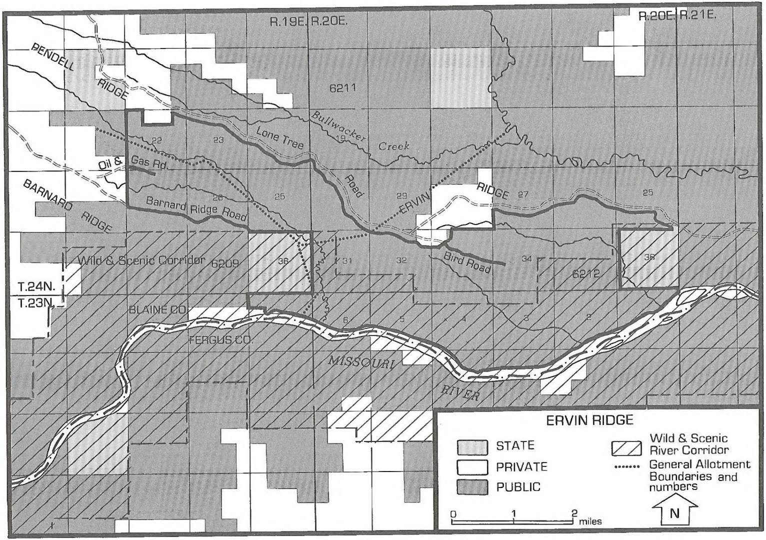

R.19E. R.20E.
R.20E. R.21E.
PENDELL RIDGE
6211
Bullwacker Creek
Lone Tree Road
Oil & Gas Rd.
BARNARD RIDGE
Barnard Ridge Road
ERVIN RIDGE
Bird Road
22
23
19
26
25
29
27
25
36
31
32
34
36
6209
6212
Wild & Scenic Corridor
T.24N.
T.23N.
BLAINE CO.
FERGUS CO.
6
5
4
3
2
MISSOURI RIVER
ERVIN RIDGE
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
General Allotment Boundaries and numbers
0
1
2
miles
N

TABLE 3.3: MANMADE FEATURES IN THE ERVIN RIDGE WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 24 N., R. 19 E. Sec. 27	West edge	1 Acre	Next to a maintained road.
2	T. 24 N., R. 19 E. Sec. 23	Northwest edge	1 Acre	Small reservoir off a vehicle way
3	T. 24 N., R. 19 E. Sec. 25	Near Lone Tree Ridge Road	1 Acre	Small reservoir that lies off a vehicle way.
4	T. 24 N., R. 19 E. Sec. 26	Near the end of Barnard Ridge	1 Acre	Small reservoir that lies off a ridge road.
5	T. 24 N., R. 20 E. Sec. 19	Adjacent to Lone Tree Ridge Road	1 Acre	Small reservoir that lies adjacent to a ridge road.
6	T. 24 N., R. 20 E. Sec. 33	Along the south edge of Ervin Ridge	1 Acre	Well screened reservoir in drainage.
7	T. 24 N., R. 20 E. Sec. 33	Near Ervin Ridge	1 Acre	Located near top of ridge and visible near surrounding rise.
8	T. 24 N., R. 20 E. Sec. 34	South of Ervin Ridge	1 Acre	It has a dike leading into it and lies near the top of a ridge.
9	T. 24 N., R. 20 E. Sec. 27	Along Ervin Ridge Road	1 Acre	A well screened reservoir lying near the top of a drainage.
10	T. 24 N., R. 19 E. Sec. 25	Along Lone Tree Ridge Road	1 Acre	Well screened reservoir near top of ridge.
11	T. 24 N., R. 19 E. Sec. 30	Along Ervin Ridge Road	1 Acre	Well screened reservoir that lies near top of drainage.
12	T. 24 N., R. 20 E. Sec. 26		1 Acre	Well screened reservoir that lies near top of drainage.
Vehicle Ways				
1	T. 24 N., R. 19 E. Secs. 26 & 27	Leads off cherry-stemmed road on west side	.75 Mile	Constructed vehicle way that follows side and top of ridge to a dry gas well and fence line. Apparently constructed for access into an old fire.
2	T. 24 N., R. 19 E. Sec. 22	Leads north from west cherry-stemmed road	.25 Mile	Constructed for access to a gas well that turned dry.
3	T. 24 N., R. 19 E. Sec. 22	Northwest edge off Lone Tree Ridge Road	.5 Mile	Two wheel dirt track that leads to a reservoir.
4	T. 24 N., R. 19 E. Sec. 24	North edge off Lone Tree Ridge Road	.5 Mile	Two wheel dirt track that leads to a reservoir.
5	T. 24 N., R. 19 E. Secs. 24 & 25	North edge off Lone Tree Ridge Road	5 Mile	Constructed access to a dry gas hole. Shows little use.
6	T. 24 N., R. 20 E. Sec. 30	North edge off Lone Tree Ridge Road	.25 Mile	Almost nonexistent two wheel track
7	T. 24 N., R. 20 E. Sec. 32	North edge off Lone Tree Ridge Road	.25 Mile	Constructed access to a dry gas hole. Shows little use.
8	T. 24 N., R. 20 E. Secs. 32 & 33	North edge off cherry-stemmed	1 Mile	Two wheel track that leads to reservoir road
9	T. 24 N., R. 20 E. Sec. 33	North edge off cherry-stemmed	1 Mile	Two wheel track that leads to reservoir. road
10	T. 24 N., R. 20 E. Sec. 26	Leads north of Barnard	.25 Mile	Two wheel track to old barn. Creek boundary road
11	T. 24 N., R. 20 E. Sec. 26	Northwest edge of Ervin Ridge road	.10 Mile	Constructed but not maintained access to capped gas well and reservoir
Airplane Landing Strip				
1	T. 24 N., R. 20 E. Sec. 33	South of the Ervin Ridge	.5 Mile	Area that was flattened and cleared of sagebrush. Has little, if any, use.
Fences				
1	T. 24 N., R. 19 E. Secs. 22, 23, 25, & 26	In Williamson Coulee	2.5 Miles	Three four-strand metal post barbed wire.
2	T. 24 N., R. 20 E. Sec. 30	North edge off Lone Tree Ridge Road	25 Mile	Three four-strand wooden post barbed wire.
Dry Gas Wells				
1	T. 24 N., R. 19 E. Sec. 22	West edge	1 Acre	Very well screened dry hole.
2	T. 24 N., R. 19 E. Sec. 27	On cherry-stemmed road near west edge	1 Acre	Dry hole on end of ridge.
3	T. 24 N., R. 19 E. Sec. 25	Off Lone Tree Ridge Road	1 Acre	Dry hole on end of ridge.
4	T. 24 N., R. 20 E. Sec. 32	Off Ervin Ridge Road	1 Acre	Dry hole that is very well screened.
5	T. 24 N., R. 20 E. Sec. 34	South of Ervin Ridge and at end of cherry-stemmed road	5 Acres	Almost visually rehabilitated.
6	T. 24 N., R. 20 E. Sec. 26	South of Williamson Coulee	5 Acres	Lies on side of ridge.
Cherry-stemmed Roads				
1	T. 24 N., R. 19 E. Secs. 22 & 27	Leads from west edge	.75 Mile	Constructed and often used dirt road that leads to reservoir.
2	T. 24 N., R. 20 E. Secs. 33 & 34	Leads from north edge	1.75 Miles	Constructed and often used dirt road that leads to dry gas well.

Source: BLM, 1981, 1986

Hunting and recreation from the Upper Missouri Wild and Scenic River are presently the two most common forms of recreational use in the study area. Hunting is usually from vehicles traveling along the ridgetops or by boat. Inside the WSA, hunting is challenging because retrieving game is complicated by the steep slopes. Other forms of primitive recreation that could occur in the unit include horseback riding, hiking, sightseeing, photography and fishing from the riverbank.

Access to the area is limited. The main access points are through the Ervin Ridge and Barnard Ridge Roads and by boat from the Missouri River. Wet weather and snow often make these dirt roads impassable and can quickly seal off the area, limiting access to May-October during dry weather.

Although there are opportunities for recreation, the WSA's steep terrain channels use along the river, along coulee bottoms or on finger ridges. The lack of vegetation and drinking water, the difficulty of travel during wet weather and rattlesnakes increase the hazards of recreation in the unit.

Supplemental Values

The WSA is very scenic and rugged, combining steep slopes of exposed clay with narrow finger ridges. Trees are few. The area is historically significant with prehistoric artifacts being found and with a few remnants of the homestead era still extant.

MINERALS

This WSA contains two unnamed known geologic structures (KGSs) (T. 24 N., R. 19 E., Section 22 and T. 24 N., R. 20 E., Section 32). Nineteen hundred acres of the unit in R. 19 E. are considered by industry as part of the Leroy Field. Although six dry holes have been drilled in the WSA, shut-in natural gas wells (successful wells that have been capped until a pipeline is built) are located within a mile of its north, east and west boundaries. Natural gas potential is rated high. The oil potential is low to moderate since oil discoveries are structurally possible, although there have been no discoveries in the area. Approximately 37 percent (3,738 acres) of the WSA is under post-FLPMA lease. Approximately 17 percent (1,740 acres) of the WSA is under pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

Coal beds in the Ervin Ridge WSA are of no greater extent or better quality than elsewhere in the area. The disadvantages of coal from the Judith River Formation and the difficulties of access make this mineral commercially unattractive, given present-day air standards and technology. Coal is not being mined in this WSA now, and its coal potential is low.

No bentonite is being worked in the Ervin Ridge WSA and the quality and quantities of the mineral suggest the deposits will remain undeveloped.

Ervin Ridge also contains diatremes which could bear diamonds. There are nine mining claims in the Ervin Ridge WSA, but no diamonds have been discovered to date and the potential for such discoveries is low.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 40 and 160. The mule deer population uses the eastern three-fourths of the WSA primarily in the spring, summer, and fall. The western fourth of the WSA is high valued year long habitat, but contains no severe winter concentration areas. As many as 35 grouse may occupy the WSA. There are no known leks in the WSA. There are no fisheries reservoirs and all drainages are intermittent. (Appendix 3.1.)

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are three operators with grazing permits in the WSA. These operators have 634 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.4 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 300 RVDs per year. Of this use, it is estimated that 10 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

WOODHAWK WSA

The Woodhawk WSA (8,100 acres) is next to the Missouri River in Fergus County. Parts of the unit are in the Upper Missouri Wild and Scenic River Management Corridors 1,937 acres being in the "Wild" Section and 1,540 acres in the "Scenic." The eastern and northern boundaries of the study area are formed by the river and the southern border by a county road. The western boundary is formed partially by an old wagon road with the rest drawn on legal subdivisions (Figure 3.5).

WILDERNESS VALUES

Naturalness

Although there are several developments inside the study area, most are scattered and well screened. There is a cluster of reservoirs in T. 23 N., R. 21 E., Sections 25, 26 and 27 which detract from naturalness for the southern part of the area. The cherry-stemmed Deweese Ridge Road which ends 1.5 miles inside the

FIGURE 3.5 WOODHAWK (MT-068-246) LAND STATUS/ALLOTMENT BOUNDARY MAP

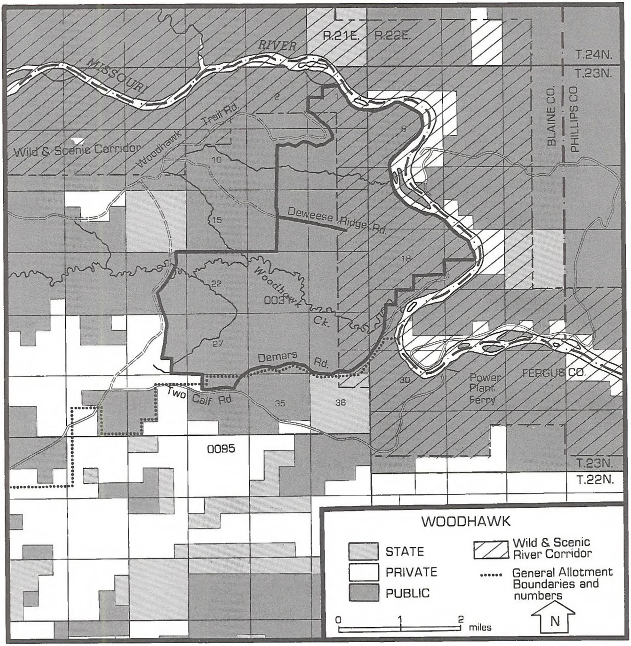

MISSOURI
RIVER
R.21E.
R.22E.
T.24N.
T.23N.
2
1
6
Trail Rd.
Woodhawk
Wild & Scenic Corridor
10
BLAINE CO.
PHILLIPS CO.
15
Deweese Ridge Rd.
18
22
Woodhawk Ck.
003
27
Demars Rd.
30
Power Plant Ferry
FERGUS CO.
Two Calf Rd.
35
36
0095
T.23N.
T.22N.
WOODHAWK
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
General Allotment Boundaries and numbers
0
1
2
miles
N

TABLE 3.4: MANMADE FEATURES IN THE WOODHAWK WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 23 N., R. 21 E. Sec. 27	Southwest corner of the unit	1 Acre	Small retention reservoir in steep drainage.
2	T. 23 N., R. 21 E. Sec. 27	Southwest corner of unit	1 Acre	Small retention reservoir in steep drainage.
3	T. 23 N., R. 21 E. Sec. 26	Near south border of unit	1 Acre	Small retention reservoir in steep drainage.
4	T. 23 N., R. 21 E. Sec. 25	Southeast corner of unit	1 Acre	Pit reservoir along steep drainage.
5	T. 23 N., R. 21 E. Sec. 26	Near south border of unit	1 Acre	Small retention reservoir in steep drainage.
6	T. 23 N., R. 21 E. Sec. 28	Southeast corner of unit	1 Acre	Small retention reservoir in steep drainage.
7	T. 23 N., R. 21 E. Sec. 25	Near south border of unit	1 Acre	Small retention reservoir in steep drainage.
8	T. 23 N., R. 21 E. Sec. 22	Near west border of unit	1 Acre	Small retention reservoir in steep drainage.
9	T. 23 N., R. 21 E. Sec. 23	Near center of unit and west of Woodhawk Creek	1 Acre	Small retention reservoir in steep drainage.
10	T. 23 N., R. 21 E. Sec. 24	Center of unit along Woodhawk Creek	1 Acre	Small retention reservoir in steep drainage.
11	T. 23 N., R. 21 E. Sec. 13	Center of unit	1 Acre	Small retention reservoir in steep drainage.
12	T. 23 N., R. 21 E. Sec. 26	South center of unit	1 Acre	50,000 gallon water saver.
Vehicle Ways				
1	T. 23 N., R. 21 E. Secs. 21 & 22	West side of WSA	1.0 Mile	Access to reservoir.
2	T. 23 N., R. 21 E. Sec. 22	Southwest part of WSA	.75 Mile	Access to reservoir.
Fences				
1	T. 23 N., R. 21 E. Secs. 1 & 12	Northwest corner of unit	.5 Mile	Three four-strand metal/wood post barbed wire fence along steep drainage.
2	T. 23 N., R. 22 E. Secs. 17 & 18	Along east edge of unit	.75 Mile	Three four-strand metal/wood post barbed wire fence that is exposed to river.
3	T. 23 N., R. 21 E. Secs. 25, 26, & 27	Along south edge of unit	2.25 Miles	Three four-strand metal/wood post barbed wire fence that follows side of ridge.
Cherry-stemmed Road				
1	T. 23 N., R. 21 E. Secs. 13 & 14	Near center of unit	1.5 Miles	Partially graded dirt road that follows ridgetop.

Source: BLM, 1981, 1986

area's boundary (Table 3.4) detracts from naturalness in the center of the area. The manmade features inside the unit are mostly associated with livestock grazing. Boundary modifications would not significantly increase this WSA's apparent naturalness because of the location of manmade features.

Solitude and Primitive Recreation

Woodhawk is a compact WSA being 4 miles long by 2½-4 miles wide with the distance from the center to the perimeter about 1½-2 miles.

Approximately 60% of the WSA has good to excellent screening vegetation, but bare, south-facing slopes lack screening. The middle of the study area and the southwestern edge are devoid of forest vegetation because of fire. In portions of the unit, the topography also provides good screening, creating opportunities for solitude.

The cherry-stemmed road in the middle of Woodhawk is on a high, open ridge, heavily used during hunting season. This road is the only access to the central portion of the unit and would tend to congregate both motorized and non-motorized users, detracting from the wilderness quality by channeling visitors to the otherwise most isolated and scenic part of this WSA. Vehicle traffic is not the only distraction. Farming operations to the south and north are visible and often audible, affecting the overall opportunity for solitude from the high ridges and hilltops. Lights from mining operations in the Little Rockies are also visible at night, but from a long distance. This WSA, like all the units in the Missouri Breaks, is in a National Guard fighter training zone. Eight aircraft are scheduled to fly daily over the WSA at 4,000 feet; periodic disruptions of solitude throughout the unit should be expected.

Primitive recreational possibilities in the unit consist of rock climbing on the cliffs (T. 23 N., R. 21 E., Sections 13 and 24), horseback riding on the ridge lines or main drainages, hiking, hunting and sightseeing. Visitors presently take vehicles on Deweese Ridge Road or on the northern boundary road in T. 23 N., R. 21 E., Sections 1, 2, 11 and 12. These roads are also used for fire control routes. There is also some use of camping areas along the river by floaters, even though no potable water is available in the unit. Good campsites can also be found along Deweese Ridge in the middle of the WSA.

growing prairie grasses and forbs. Approximately 25% of the area supports scattered ponderosa and lodgepole pine, juniper and Douglas fir. Pockets of conifers offer excellent vegetative screening along the northern border and ridgetops.

The WSA is surrounded by a sparsely populated and undeveloped area. Offsite impacts are from traffic on the boundary roads and two homesites, one recently constructed and one under construction (T. 23 N., R. 33 E., Section 22 and T. 23 N., R. 33 E., Section 28). These homes lie on ridgetops that overlook two large drainages inside the unit, affecting 400-800 acres. The road that parallels the west border and the Plum Creek Road on the northeast is often used by the adjacent landowners. Farming operations within 1 mile of the unit are visible from the border and some of the northwestern ridges. The best opportunities for solitude are found in the southern half of the WSA, because of the few developments there and the distance from outside distractions.

Topography and vegetation screen traffic on adjacent roads. Other minor offsite impacts include motorized boat travel on the Fort Peck Reservoir and a jet training zone. The WSA is flown over by National Guard fighters on the average of eight times daily at 4,000 feet. These occasional aircraft might disrupt the solitude in the WSA.

Primitive recreation within the unit could include hiking, camping, hunting, horseback riding, rock climbing and photography. Hunting along the ridgetops with vehicles is the most popular use, pressure is heaviest in September during the archery season. Horseback riders and hikers can find very scenic traveling on the ridgetops along the C.M. Russell National Wildlife Refuge. Challenges to users of this WSA are presented by a lack of drinking water, difficult access during wet weather, mediocre camping sites and occasional rattlesnakes and insects. The steep terrain could channel users to ridges or drainage bottoms.

Access is mostly controlled by private landowners, but public access is available at the eastern end of Timber Creek Road or by walking through a portion of the C.M. Russell National Wildlife Refuge. Rain or snow often make the dirt roads in the unit impassable, limiting access to May-October during dry weather.

Supplemental Values

The Burnt Lodge WSA has the very scenic, rugged appearance typical of the Missouri Breaks. Its eroded terrain has exposed sandstone, sheer walls and castle-like formations suitable for climbing. Prehistoric and historic remains probably exist in the unit but there have been no discoveries.

MINERALS

No test holes have been drilled in the Burnt Lodge WSA and it contains no KGSs. Potential for natural gas is rated moderate as gas-bearing formations underlie the area. Oil potential is seen as less likely, because of the lack of discoveries. The nearest KGS is Bowdoin Dome, approximately 35 miles to the north. Approximately 26 percent (3,610 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

There may be coal in the WSA since the coal-bearing Tullock Member of the Fort Union Formation is exposed. The study in the CMR next to the WSA found the "Z" coal bed at the base of the Tullock but samples proved high in ash content and low in heating value, so reserves were not calculated. Several other thin beds lie higher in the Tullock Member. The potential of coal in this unit is low since the thin beds of poor quality coal make extraction uneconomical.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 65 and 110. The mule deer population uses the area year long, although there are no concentration areas during severe winters. There are no fisheries reservoirs and all drainages are intermittent.

There have been several transplants of elk on the CMR north of the Missouri since 1951. The WSA elk population has grown to between 160 and 195. The herds provide some hunting opportunities. The WSA is contiguous on the south boundary with the CMR. The only species identified as having overall distribution along this portion of the CMR are mule deer and elk. Travel by both species across the administrative boundary is unimpaired. However, this is more important for elk, as an "occasional winter distribution," of which 80 percent is on CMR, overlaps onto the south edge of the WSA (CMR FEIS 8/86) (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently three operators with grazing permits in the WSA. These operators have 2,015 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.12 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 500 RVDs per year. Of this use, it is estimated

Although access is very good, rain or snow quickly seal off the area, limiting the user season to May-October in dry conditions. Hunting quality is restricted by the difficulty of game retrieval and by fluctuating game populations. Rattlesnakes and the steep (sometimes loose) slopes provide hazards to the unwary visitor.

Supplemental Values

Woodhawk is characterized by colorful, broken topography. Most south slopes are open, banded clay. Two major drainages flow east-west into the Missouri, leaving a deeply eroded landform in their wake. About 2/3 of the WSA is covered with ponderosa pine and juniper. Unfortunately, the best view of this spectacular scenery is from the access roads and the cherry-stemmed Deweese Ridge Road.

The study area contains several prehistoric occupation sites. In historic times, woodhawkers cut timber there to fuel steamboats on the Missouri (hence the name of this WSA) and the unit was probably traversed by Chief Joseph's Nez Perce in their attempt to escape to Canada in 1877. The Indians demanded supplies from a U.S. Army supply dump on Cow Island (next to the WSA). A sharp fight ensued when the Army refused to cooperate.

The Corps of Engineers built a wing dam in 1881 between Cow Island and the mainland to deepen the channel around Cow Island. Cow Island was also a reshipment point for freight from steamboats stopped by the low water in the river upstream.

MINERALS

The Woodhawk WSA has no KGSs and no test wells have been drilled. Still, the proximity to the Leroy Natural Gas Field and its similar geologic structure suggest that pockets of natural gas are trapped beneath the surface. Natural gas potential is therefore rated high. There have been no oil discoveries in the area, although it is structurally possible, so the potential is low to moderate. Approximately 1 percent (120 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

Woodhawk is part of the Lewistown Coal Field. During the 1920s, the Van Buskirk Mine (just north of the WSA) was reported to have lignite beds from 5-10 feet thick (Stanton and Hatcher 1905). No coal is being mined now. This coal shares the disadvantages of coal in the Judith River Formation in general, being found in thin, small layers, with high moisture and sulphur content and low heating value, all of which make the mineral uneconomical to mine. The low quality and quantity of the coal is compounded by the remoteness of the area. Coal potential is thus rated low.

The bentonite is of poor quality and the beds are too thin to be worth developing in this WSA.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 30 and 150. The mule deer population uses the area primarily in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. Approximately 35 sage and sharp-tailed grouse use the area. There are no known leks in the WSA. There are no fisheries reservoirs and all drainages are intermittent (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT LEVELS

There are two operators with grazing permits in the WSA. These operators have 840 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.5 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 400 RVDs per year. Of this use, it is estimated that 10 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

COW CREEK WSA

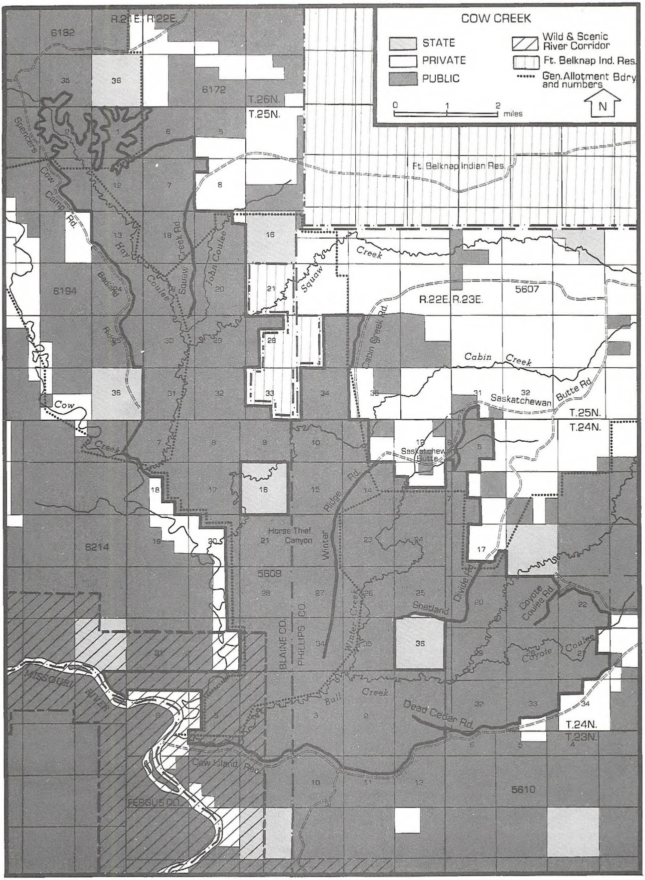
The 34,050 acres of public lands in the Cow Creek WSA are in south Blaine and Phillips Counties next to Cow Creek. Of this unit, 2,018 acres are in the "Wild" Section of the Upper Missouri Wild and Scenic River Management Corridor. The border of the WSA is formed by roads, private land, Montana State land, the Missouri River and topographic contours. Boundaries are extremely difficult to locate on the ground except for those on roads (Figure 3.6).

WILDERNESS VALUES

Naturalness

There are five cherry-stemmed roads in this unit and several developed areas along the northwest and southern boundary roads. (See Table 3.5.) Most developments — reservoirs, vehivle ways and fences — are

FIGURE 3.6 COW CREEK (MT-066-256) LAND STATUS/ALLOTMENT BOUNDARY MAP



COW CREEK
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
Ft. Belknap Ind. Res.
Gen. Allotment Bdry and numbers
0 1 2 miles
N
R.21E. R.22E.
R.22E. R.23E.
T.26N.
T.25N.
T.24N.
T.23N.
6182
6172
6194
6214
5607
5609
5610
Ft. Belknap Indian Res.
Spencers Cow Camp Rd.
Hay Coulee
Badland Ridge
Squaw Creek Rd.
John Coulee
Squaw Creek
Cabin Creek Rd.
Cabin Creek
Saskatchewan Butte Rd.
Saskatchewan Butte
Cow Creek
Horse Thief Canyon
Winter Ridge Rd.
Winter Creek
Divide Rd.
Shetland
Coyote Coulee Rd.
Coyote Coulee
Bull Creek
Dead Cedar Rd.
Cow Island Rec.
MISSOURI RIVER
FERGUS CO.
BLAINE CO.
PHILLIPS CO.

TABLE 3.5: MANMADE FEATURES IN THE COW CREEK WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 25 N., R. 22 E. Sec. 7	North edge	1 Acre	Retention pit in head of drainage.
2	T. 25 N., R. 22 E. Sec. 18	North side near Hay Coulee	1 Acre	Small retention reservoir near head of drainage.
3	T. 25 N., R. 22 E. Sec. 30	North side in Hay Coulee	1 Acre	Very small pit reservoir.
4	T. 25 N., R. 22 E. Sec. 29	Near mouth of Squaw Creek	1 Acre	Very small pit reservoir.
5	T. 25 N., R. 22 E. Sec. 31	North side in Hay Coulee	1 Acre	Very small pit reservoir.
6	T. 24 N., R. 22 E. Sec. 15	On Phillips and Blaine County borders near center of unit	1 Acre	Small retention reservoir near head of drainage.
7	T. 24 N., R. 22 E. Sec. 22	Same as above	1 Acre	Small retention reservoir near head of drainage.
8	T. 25 N., R. 22 E. Sec. 29	Center of unit	1 Acre	Small retention reservoir near head of drainage.
9	T. 25 N., R. 22 E. Sec. 17	Northeast edge of unit	1 Acre	Small retention reservoir near head of drainage.
10	T. 25 N., R. 22 E. Sec. 19	Northwest part of unit	1 Acre	Small reservoir in Hay Coulee drainage.
11	T. 25 N., R. 22 E. Sec. 27	North-central part of unit	1 Acre	Retention reservoir in small drainage.
12	T. 25 N., R. 22 E. Sec. 26	North edge	1 Acre	Small pit reservoir near head of drainage.
13	T. 24 N., R. 23 E. Sec. 5	Near Saskatchewan Butte	1 Acre	Retention reservoir that is in a wide open area.
14	T. 24 N., R. 23 E. Sec. 5	Near Saskatchewan Butte	1 Acre	Small retention reservoir.
15	T. 24 N., R. 22 E. Sec. 14	Near Saskatchewan Butte	1 Acre	Retention reservoir that has had recent maintenance.
16	T. 24 N., R. 22 E. Sec. 27	West of Winter Creek drainage	1 Acre	Cherry-stemmed road leads to this reservoir and is well screened by trees.
17	T. 23 N., R. 22 E. Sec.2	South of Bull Creek near unit's south boundary	1 Acre	Dead Cedar Reservoir lies on flat ridge that is visible on ridgetop.
18	T. 23 N., R. 22 E. Sec. 3	Southwest side of unit	1 Acre	Retention reservoir in open area.
19	T. 23 N., R. 22 E. Sec. 11	Near south boundary of unit	1 Acre	Pit retention that is visible from surrounding area.
20	T. 24 N., R. 23 E. Sec. 33	Near south boundary of unit	1 Acre	Pit retention near head of drainage.
21	T. 24 N., R. 23 E. Sec. 34	Along southeast boundary of unit	1 Acre	Exposed retention reservoir that can be seen from surrounding area.
22	T. 24 N., R. 23 E. Sec. 20	Near end of Shetland Divide Ridge	5 Acres	Large exposed retention reservoir that is easily seen from surrounding area.
23	T. 24 N., R. 23 E. Sec. 22	Along east side of unit	2 Acres	Lies on flat and exposed ridge that is very visible.
24	T. 25 N., R. 21 E. Sec. 13	Along Spencer Ridge Road	1 Acre	Well screened reservoir along road.
25	T. 25 N., R. 21 E. Sec. 31	On northern boundary	1 Acre	Small pit reservoir.
Spring Development				
1	T. 24 N., R. 23 E. Sec. 29	Along Bull Creek	1 Acre	Has a vehicle way leading to it. It has a small metal tank that catches the water.
Vehicle Ways				
1	T. 25 N., R. 22 E. Secs. 7 & 18 T. 25 N., R. 21 E. Secs. 12 & 13	North end of unit	2.5 Miles	Constructed on and follows ridge to bottom of Hay Coulee.
2	T. 25 N., R. 22 E. Sec. 7	North end of unit	.25 Mile	Very primitive two wheel dirt track.
3	T. 25 N., R. 22 E. Sec. 7 T. 25 N., R. 21 E. Sec. 12	North end of unit	1 Mile	Very primitive access to Hay Coulee that shows occasional sign of construction.
4	T. 25 N., R. 22 E. Secs. 7 & 18	North end of unit	.75 Mile	Two wheel grass track leading out on the ridge.
5	T. 25 N., R. 21 E. Sec. 13	West of Hay Coulee	.5 Mile	Constructed access to a dry gas well. Shows very little use.

TABLE 3.5: CONTINUED

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Vehicle Ways (Continued)				
6	T. 25 N., R. 22 E. Sec. 18	East of Hay Coulee	.5 Mile	Two wheel grass track that leads to reservoir.
7	T. 25 N., R. 22 E. Sec. 19	Leads off ridge to Hay Coulee	.75 Mile	Constructed access to Hay Coulee but has been washed out.
8	T. 25 N., R. 22 E Secs. 17 & 20	East of John Coulee	2 Miles	Two wheel dirt track leading down ridge that shows continuous use.
9	T. 25 N., R. 21 E. Sec. 25	East of Squaw Creek on east side of unit	.25 Mile	Constructed access to a dry gas well that shows very little use. Lies on top of ridge.
10	T. 25 N., R. 22 E. Sec. 34	On north end of unit	.5 Mile	Very primitive two wheel track that leads to reservoir.
11	T. 24 N., R. 22 E. Secs. 10, 11, 14, & 15	North center of unit	2 Miles	Was apparently used for access to a fire in the area. Much of it is part of a bladed fire break.
12	T. 24 N., R. 22 E. Secs. 14 & 15	North center of unit	.5 Mile	Two wheel primitive track that leads out to end of ridge.
13	T. 24 N., R. 22 E. Sec. 15	Center of unit	1 Mile	Constructed access to dry gas well. There are occasional deep cuts in side banks and numerous water barriers.
14	T. 24 N., R. 22 E. Secs. 15, 21, & 28	Center of unit	2.5 Miles	The access at its beginning shows moderate use. Towards the end it is difficult to follow. Little, if any, signs of construction.
15	T. 24 N., R. 22 E. Secs. 27 & 28	Center of unit	1.25 Miles	Very primitive two wheel grass track.
16	T. 24 N., R. 22 E. Secs. 27, 33, & 34	Center to south of unit	1.5 Miles	Shows signs of construction but has a very primitive appearance.
17	T. 24 N., R. 23 E. Sec. 5	East of Saskatchewan Butte	.25 Mile	Two wheel track to reservoir.
18	T. 24 N., R. 23 E. Secs. 5, 6, & 7	East of Saskatchewan Butte	.5 Mile	Two wheel track to reservoir.
19	T. 24 N., R. 23 E. Secs. 20 & 29	North of Bull Creek	.75 Mile	Primitive access to spring. There are signs of construction near Bull Creek.
20	T. 23 N., R. 22 E. Secs. 11 & 12	Along south boundary	.5 Mile	Primitive two wheel track that leads to reservoir.
21	T. 23 N., R. 22 E. Sec. 12	Along south boundary	.25 Mile	Alternate primitive two wheel track that leads to reservoir.
22	T. 23 N., R. 22 E. Secs. 1, 2, 3, & 11	Along south boundary	1.5 Miles	Primitive access along ridge.
23	T. 23 N., R. 23 E. Sec. 6 T. 24 N., R. 23 E. Sec. 32	Along south boundary	.5 Mile	Faint tracks leading to end of ridge.
24	T. 24 N., R. 23 E. Sec. 32	Along south boundary	.25 Mile	Faint tracks leading to end of ridge.
25	T. 24 N., R. 23 E. Secs. 32 & 33	Along south boundary	1 Mile	Two wheel track leading to end of ridge. Has had frequent use.
26	T. 24 N., R. 23 E. Secs. 28, 33, & 34	Along southeast boundary	.75 Mile	Two wheel track leading to end of ridge. Has had frequent use.
27	T. 24 N., R. 23 E. Sec. 33	Along southeast boundary	.25 Mile	Very faint two wheel track.
Fences				
1	T. 23 N., R. 22 E. Sec. 5	Near mouth of Bull Creek	.25 Mile	Three four-strand wooden post barbed wire fence.
2	T. 23 N., R. 22 E. Sec. 4	South center of unit	.25 Mile	Three four-strand wooden post barbed wire fence.
3	T. 24 N., R. 22 E. Secs. 13, 14, 22, & 23 T. 24 N., R. 23 E. Secs. 7, 8, & 17	Around Winter Creek drainage	6 Miles	Four-strand steel post barbed wire fence.
4	T. 24 N., R. 22 E. Secs. 11 & 14 T. 25 N., R. 22 E. Sec. 27	Near Cabin Creek drainage	2.5 Miles	Three four-strand wood and metal post barbed wire fence.
5	T. 24 N., R. 22 E. Secs. 20 & 21	Near Cow Creek on west edge of unit	.25 Mile	Three strand wooden post barbed wire fence.
6	T. 24 N., R. 22 E. Secs. 7 & 18 T. 25 N., R. 22 E. Secs. 19, 30, & 31	Near mouth of Squaw Creek	4 Miles	Three four-strand wood and metal post barbed wire fence.
7	T. 25 N., R. 22 E. Secs. 17, 18, & 19	West side of John Coulee	1.5 Miles	Three four-strand wood and metal post barbed wire fence.

TABLE 3.5: CONTINUED

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Fences (Continued)				
8	T. 25 N., R. 21 E. Secs. 12 & 13	Along Hay Coulee	1.75 Miles	Three four-strand wood and metal post barbed wire fence.
9	T. 25 N., R. 21 E. Secs. 11 & 12	Crosses Hay Coulee	1 Mile	Three four-strand wood and metal post barbed wire fence.
Dry Gas Wells				
1	T. 25 N., R. 22 E. Sec. 7	Near north edge of unit	1 Acre	Revegetated to a nearly natural appearance.
2	T. 25 N., R. 22 E. Sec. 18	West of John Coulee	1 Acre	Revegetated to a nearly natural appearance.
3	T. 25 N., R. 21 E. Sec. 13	Northwest corner	1 Acre	Revegetated to a nearly natural appearance.
4	T. 25 N., R. 21 E. Sec. 25	West edge of unit	1 Acre	Revegetated to a nearly natural appearance.
5	T. 25 N., R. 22 E. Sec. 19	Along Hay Coulee	1 Acre	Revegetated to a nearly natural appearance.
6	T. 24 N., R. 22 E. Sec. 15	In the center of unit	1 Acre	Revegetated to a nearly natural appearance.
7	T. 23 N., R. 22 E. Sec. 2	Near Dead Cedar Reservoir		Revegetated to a nearly natural appearance.
Diversion Dam				
1	T. 24 N., R. 23 E. Sec. 5	East of Saskatchewan Butte	.25 Mile	Lies in flatarea and shows recent construction.
Powerline				
1	T. 24 N., R. 23 E. Sec. 5 T. 25 N., R. 23 E. Sec. 31	East of Saskatchewan Butte	1 Mile	Very visible within the entire section.
Cherry-stemmed Roads				
1	T. 25 N., R. 22 E. Secs. 7, 17, 18, 19, & 20	East of Hay Coulee	2.8 Miles	Constructed access route that follows ridgetop to Hay Coulee. Shows less use towards end of road.
2	T. 24 N., R. 22 E. Secs. 14, 15, 22, 26, & 27	West of Winter Creek	3.5 Miles	Constructed two wheel track road that leads to reservoir. Shows seasonal use.
3	T. 24 N., R. 22 E. Sec. 25 T. 24 N., R. 23 E. Secs. 17, 19, & 20	Follows Shetland Divide	2.25 Miles	Constructed two wheel track road that leads to a state section. Shows seasonal use.
4	T. 23 N., R. 22 E. Secs. 1 & 2 T. 23 N., R.23 E. Sec. 6	Leads to Dead Cedar Reservoir	1.5 Miles	Constructed for access to a gas well (now dry) and entry into a reservoir.
5	T. 24 N., R. 23 E. Secs. 21 & 22	In the southeast edge of unit	1 Mile	Seldom used access route along ridge. It has two wheel track appearance.

Source: BLM, 1981

associated with livestock grazing. Seven petroleum drilling pads and access ways are also scattered throughout the WSA.

The developments in many cases are screened by rugged topography and vegetation. The majority of Cow Creek is apparently natural. There are several developed areas that adversely affect naturalness. A 600-acre area east of Saskatchewan Butte (T. 25 N., R. 23 E., Section 31 and T. 24 N., R. 23 E., Sections 5, 6, 7 and 8) has two reservoirs, a diversion dam, three vehicle ways and a powerline, all readily visible in the flat, sparsely vegetated area. Another developed area of about 1,500 acres of rolling prairie in the southeast corner of the unit contains six vehicle ways (totaling 3½ miles) and two easily-seen reservoirs.

The majority of other developments that reduce the area's naturalness are found near Hay Coulee, Coyote Coulee, on the Shetland Divide and Winter Coulee ridges.

Solitude and Primitive Recreation

Cow Creek is "L" shaped, about 15 miles long and 1/4 to 7 miles wide. Most of the terrain is rugged and steep along the many drainages that feed into Cow Creek and the Missouri. The Bull Creek, Winter Creek and Hay Coulee drainages have spectacular sandstone cliffs forming the drainage walls. In sharp contrast, some parts of the WSA are rolling open prairie, particularly towards the southeast corner. Where slopes and soil allow, the vegetative cover is predominantly short prairie grasses, sagebrush and greasewood. Ponderosa pine, lodgepole pine, Douglas fir and juniper are prevalent throughout the WSA, with the densest stands growing along the northern end.

The topography provides excellent screening. Solitude opportunities are best along Squaw, Cabin and Winter Creeks and the lower reaches of Bull Creek. The size of these drainages, combined with their lack of development supplement solitude. Visitors to areas outside these drainages and nearer the perimeter have more potential for human contact.

Solitude in other parts of Cow Creek is affected by the unit's configuration and the five cherry-stemmed roads. A farming operation which borders the study area near John Coulee and a ranch (T. 25 N., R. 22 E., Section 8) reduces solitude on about 1,800 acres in the northern end. A homesite occupied during the summer and a road are also visible (T. 25 N., R. 23 E., Section 31 and T. 24 N., R. 23 E., Sections 5 and 6).

In the northwestern end of the unit near Hay Coulee, a user would never be more than a mile from the perimeter of the unit. The cherry-stemmed road along the ridgetop and an adjacent ranch operation would force a visitor to follow the narrow drainages to seek solitude. The open, rolling and narrow parcel east of Saskatchewan Butte also has very little solitude. Activities around the homesite and road are always in sight.

The small groves of conifers in the prairie terrain of the southeast corner of Cow Creek provide little screening and can be seen from the southern boundary road and the Coyote Coulee cherry-stemmed road. The cherry-stemmed roads along the Winter Creek Ridge and the ridge (T. 23 N., R. 22 E., Section 1) are flat and also have few trees. These ridges are in constant view of vehicle traffic on the cherry-stemmed roads. Traffic along the roads outside the unit are easily seen and heard from these ridges. A person would have to drop below the ridge to have solitude.

Old buildings and vehicle ways near the Cow Island Recreation Area are visible from about 500 acres of the southwest end of the WSA. Occasional motorized boat traffic can be seen from the ridges in this part of the unit.

Another offsite distraction comes from the Landusky Mine in the Little Rocky Mountains, 15 miles away. Bright lights at night from the mine can be seen from a few locations in Cow Creek.

The WSA is in a National Guard jet fighter training zone; flights averaging eight daily at an altitude of 4,000 feet. Periodic disruptions of solitude should be expected.

Primitive forms of recreation in the WSA include hunting, horseback riding, hiking, photography and rock climbing; hunting is the most popular at the present time. Hunting is normally limited to areas around access roads because of the difficulty of retrieving game. The Upper Missouri Wild and Scenic River, adjacent to the unit, has increased public awareness of the WSA's recreational opportunities. People floating the river often stop to hike and explore within the unit.

Hazards to recreation in the WSA are presented by rattlesnakes, the lack of drinking water, the difficulty of travel in wet weather and the area's steep terrain. Steep slopes may channel use to the major drainages or finger ridges, congregating visitors in a few locations. Better camping sites can be found along ridges or near the river.

Access into Cow Creek is available along the northwest and southern boundaries and marginal access is also available from the Missouri River through public lands. Other accesses are controlled by private landowners. Wet weather and snow normally limit access to May-October or during dry weather.

Supplemental Values

Although the area is rough and dry, scenic features are a notable supplementary attribute of the Cow Creek WSA. Of particular beauty is a 4-mile long, sheer wall of sandstone that lies on the west side of the Winter Creek drainage. Wind and water have carved this wall into many castle-like formations suitable for climbing.

The WSA is also historically rich. Tipi rings, rock cairns and a buffalo jump indicate that the area was used extensively by early people. Along the west boundary, the Nez Perce Indians traveled the well-known Cow Island Trail during their escape attempt to Canada in 1877. The Winter Creek drainage was used for catching wild horses at the turn of the century. The box canyon above the creek formed a natural corral called "Horse Thief Pass." Along this canyon and near Shetland Divide, names are etched in the sandstone that date back to the 1800s.

MINERALS

One wildcat well (of seven drilled) produced a "show" of natural gas in this WSA. Its nearness and similar geological structure to the Leroy Field suggest that the WSA is a good risk for further oil and gas exploration. The potential for natural gas is rated high. Oil has a low to moderate potential for much the same reasons as in the WSAs previously discussed. No oil has been discovered to date in the area, although discoveries are structurally possible. Approximately 21 percent (7,230 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The Cow Creek WSA is part of the North Central coal field and has 1,200 acres classified as coal lands by USGS. The coal is of too poor quality and of too limited quantity to merit more than a low rating for potential. None is presently being extracted.

Bentonite in this WSA is of too poor quality and of too small quantity to be economically mined.

Cow Creek has diatremes similar to diamond-bearing intrusions. Nine mining claims have been filed in this WSA. No diamonds have been discovered and the potential is rated low.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 135 and 530. The mule deer population uses approximately the northern 40% of the area primarily in the spring, summer, and fall as general habitat. Approximately 60% of the WSA is high valued year long habitat, but contains no severe winter concentration areas. Approximately 50 to 150 grouse, primarily sage grouse, use the WSA. There are no known leks in the WSA. There is one warm water fisheries reservoir. All drainages are intermittent (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently seven operators with grazing permits in the WSA. These operators have 3,397 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.6 shows the allotment boundaries in the study area. There are three water projects proposed for the WSA. These proposals are preliminary, e.g. reservoir locations have not yet been reviewed by District Operation staffs, nor have archaeological or other clearances been obtained.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 450 RVDs per year. Of this use, it is estimated that 15 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

ANTELOPE CREEK WSA

This 12,350-acre WSA is in Phillips County, just north of the Missouri River. The unit includes 4,373 acres in a "Scenic" section of the Upper Missouri Wild and Scenic River. This study area is divided by a road into two roadless areas. The west is 9,600 acres, the east is 2,750. The eastern part was included for wilderness study because it is contiguous to the Charles M. Russell National Wildlife Refuge's Antelope Creek WSA, recommended to Congress as suitable by the President.

Boundaries of the study area are formed by private land, public lands, county roads, Montana State land and the Missouri River. Except for the roads, the unit's border is difficult to locate on the ground (Figure 3.7).

WILDERNESS VALUES

Naturalness

The rough terrain of Antelope Creek has restricted most manmade features to ridges or access roads. (See Table 3.6.) The areas most affected are the northern 10 percent of the unit along the Power Plant Road, and along Antelope Creek Road on the eastern border where there are two reservoirs, a spring development and primitive vehicle tracks. The rest of the unit is very natural, has little development and is well screened from most outside impacts. A person needs only to drop from the ridges to escape these developments.

Because of the location of manmade features, boundary modifications would not significantly increase the WSA's apparent naturalness.

Solitude and Primitive Recreation

Antelope Creek is oblong-shaped, approximately 8 miles long and 1-3 miles wide. The unit has typical river breaks topography of steep, highly eroded coulees formed by tributaries that drop towards the Missouri River. The rough terrain acts as a screen, especially in the south half of the WSA, which is isolated and hidden by the surrounding ridgetops. Most of the unit is barren or sparsely vegetated. Where slopes and soil allow, vegetation usually includes short prairie grasses, sagebrush and greasewood. Juniper, ponderosa pine, lodgepole pine and Douglas fir grow along the coulees, covering about 20-30% of the area and an occasional cottonwood can be found there or along the river.

Detractions to solitude in the WSA come from offsite impacts and the smallness of the unit. Since the WSA slopes toward the river, use could be channeled up the major drainages or finger ridges, congregating visitors in a few locations. The offsite impacts affecting solitude include vehicle use on the surrounding roads, particularly the Power Plant Road, U.S. Highway 191 and motorized boat travel along the river. The Power Plant Road affects the northern and western borders and is regularly used during the warm and dry months for access to the river. U.S. Highway 191 is an all-weather road bordering the 2,750-acre part of the WSA which is contiguous with a study area inside the Charles M. Russell National Wildlife Refuge. The traffic is visible and audible from nearly 25 percent of the 2,750-acre area, especially at night.

Other offsite impacts include the Landusky Mine and the jet training zone. Lights from the mine, 15 miles away from the unit, can be seen. The WSA is also flown over by jet aircraft at 4,000 feet, averaging eight daily. This would periodically affect the quality of solitude in the unit.

Primitive recreational opportunities in Antelope Creek include hunting, horseback riding, hiking, photography, rock climbing and fishing. Hunting is currently the most popular, normally being limited to ridges with roads and trails because of the rugged terrain. The Upper Missouri Wild and Scenic River is also an important recreational addition to the area. Visitors floating the river can camp along the unit's shoreline, fish from the bank, hike the coulees or enjoy the outstanding scenery.

FIGURE 3.7 ANTELOPE CREEK (MT-065-266) LAND STATUS/ALLOTMENT BOUNDARY MAP

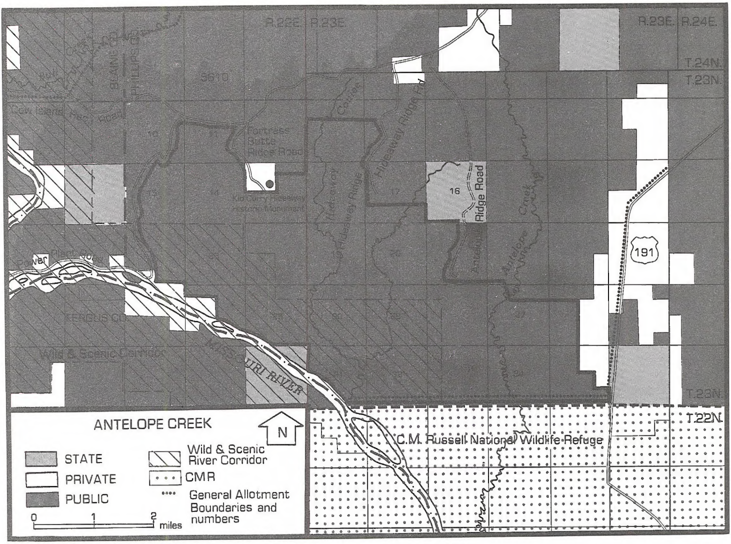

R.22E.
R.23E.
R.23E.
R.24E.
T.24N.
T.23N.
T.23N.
T.22N.
BLAINE CO.
PHILLIPS CO.
Cow Island Road
Fortress Butte Ridge Road
Kid Curry Hideaway Historic Monument
Hideaway Coulee
Hideaway Ridge Rd
Hideaway Ridge
16
17
Ridge Road
Antelope Creek
191
Power Plant Rd
FERGUS CO.
Wild & Scenic Corridor
MISSOURI RIVER
C.M. Russell National Wildlife Refuge
ANTELOPE CREEK
N
STATE
PRIVATE
PUBLIC
Wild & Scenic River Corridor
CMR
General Allotment Boundaries and numbers
0
1
2
miles

TABLE 3.6: MANMADE FEATURES IN THE ANTELOPE CREEK WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoir				
1	T. 23 N., R. 23 E. Sec. 33	Off Antelope Creek Road	1 Acre	Butch Cassidy Reservoir. Small retention reservoir near head of drainage.
Water Well				
1	T. 23 N., R. 23 E. Sec. 27	On northeast edge of unit	1 Acre	Small well at bottom of Antelope Creek.
Fence				
1	T. 23 N., R. 22 E. Sec. 25 & 26	South side along river	1 Mile	Two strand electric fence
Vehicle Ways				
1	T. 23 N., R. 22 E. Secs. 25, 26 T. 23 N., R. 22 E. Sec. 31	Along the Missouri	2 Miles	Very primitive two wheel track that receives very little use.
2	T. 23 N., R. 22 E. Secs. 14,23, & 24	West half of unit	2.5 Miles	Unconstructed two wheel track that receives very little use.
3	T. 23 N., R. 22 E. Secs. 13 & 24	West center of unit	1 Mile	Very primitive two wheel track that receives very little use.
4	T. 23 N., R. 22 E. Sec. 14	West center of unit	.75 Mile	Very primitive two wheel track that receives very little use.
5	T. 23 N., R. 22 E. Sec. 11	Northwest side of unit	.25 Mile	Two wheel track that follows ridge.
6	T. 23 N., R. 23 E. Secs. 7 & 18	Begins in the north center edge of unit	1 Mile	Two wheel track that follows ridge.
7	T. 23 N., R. 23 E. Secs. 18,19, & 30	Begins near north center edge of unit	1 Mile	Two wheel track that follows ridge.
8	T. 23 N., R. 23 E. Secs. 17, 20	Near north center edge of unit	.25 Mile	Continuation of boundary road but very primitive in character.
9	T. 23 N., R. 23 E. Secs. 20, 21	Near northeast edge of unit	.5 Mile	Primitive two wheel track that follows ridge.
10	T. 23 N., R. 23 E. Secs. 28, 29	Off Antelope Creek Road	.25 Mile	Very primitive two wheel track that follows ridge.
11	T. 23 N., R. 23 E. Sec. 33	Off Antelope Creek Road	.25 Mile	Very primitive two wheel track that follows ridge.
12	T. 23 N., R. 23 E. Secs. 32, 33	Off Antelope Creek Road	.25 Mile	Very primitive two wheel track that follows ridge.
13	T. 23 N., R. 23 E. Sec. 33	Off Antelope Creek Road	.25 Mile	Very primitive two wheel track that follows ridge.
14	T. 23 N., R. 23 E. Secs. 26, 27	Near southeast edge	.75 Mile	Very primitive two wheel track that follows ridge.

Source: BLM, 1981, 1986

Public access into the WSA is available along the Power Plant Ferry Road, the Antelope Creek Road and from the Missouri River by boat. Other access roads are controlled by private landowners. Rain or snow can make these dirt roads impassable. Weather conditions normally limit access to May-October or during dry weather.

Supplemental Values

The Antelope Creek WSA has a very scenic and rugged appearance. Its dry and heavily eroded scenery combines steep slopes of exposed shale with many narrow finger ridges. Trees are few and are normally concentrated near ridges.

The study area is also rich in historical significance. Artifacts of both prehistoric and historic eras may be found in the WSA, as the Missouri River was often used as the sole route through the region. Of particular historic significance is Kid Curry's Outlaw Hideaway next to the unit.

MINERALS

The Antelope Creek WSA is rated high for potential natural gas, since it has a similar geologic structure to the Leroy Field. No KGSs are found in the WSA and six dry holes have been drilled in the vicinity. Oil potential is rated low to moderate, since discoveries are structurally possible although there have been none yet in the Bearpaw Area. Approximately 20 percent (2,520 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The westernmost part of Antelope Creek is classified as coal lands by the USGS. A sample of coal taken during a USGS/USBM mineral survey in the CMR adjacent to this WSA tested:

Moisture Content	24%
Ash	31.6%
Sulphur	1.5%
Heat Production	6,520 BTU/lb (dry)

As in the other WSAs, this mineral is of too poor a quality and in too limited a quantity to be economically mined. None is being mined in the WSA now. Coal development potential is thus rated low.

Antelope Creek has more potential for bentonite development. Bureau of Land Management recorded the presence of a 2-3 foot thick bed of olive-green about 100-150 feet above the base of the Bearpaw Shale Formation which outcrops along the Missouri River (BLM, Physical Profile, 1970). There are six other beds (from 6-24 inches thick) in the 200-foot section above the green bed. Samples from the olive-green bed in the USGS/USBM mineral survey showed the mineral suitable for molding foundry sand and for forming iron-ore pellets but unsuitable for petroleum drilling mud (Frahme 1979). For these reasons potential of the bentonite in the Antelope Creek WSA is rated moderate. No bentonite is currently being worked in this WSA.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 50 and 195. The mule deer population uses most of the area as year long habitat, although there are no severe winter concentration areas. The westernmost 20 percent of the CMR contains a portion of the overall distribution of the CMR elk population of approximately 1,500. Small portions of the population may cross over out the east end of the WSA, primarily in spring, summer, or fall.

The WSA supports a grouse population, primarily sage grouse, of approximately 50. There are no known leks in the WSA. There are no fisheries reservoirs and all drainages are intermittent (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There is presently one operator with grazing permits in the WSA. This operator has 1,022 animal unit months (AUMs) — the amount of feed or forage required by one mature, 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.7 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE LEVELS

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 300 RVDs per year. Of this use, it is estimated that 10 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

BRIDGE COULEE WSA

The 5,900-acre WSA is located in western Garfield County, overlooking the Musselshell River. The area is an island of public land bordered by roads. On the southeast, a state section and private lands lie between the unit and the county road. The roads create an easily located and identifiable boundary. (Figure 3.8).

WILDERNESS VALUES

Naturalness

A reservoir, fence and vehicle trail in the south half of this unit (see Table 3.7) have little effect on naturalness as these features are well screened by the topography and vegetation. The cluster of reservoirs and vehicle trails in the northeast quarter are somewhat more noticeable since a fire in 1973 burned much of the vegetation. However, most of the WSA is apparently natural. There is a buried telephone and associated R/W extending 0.7 mile along the western boundary. It is not visible.

Solitude and Primitive Recreation

Bridge Coulee is rectangular in shape, measuring 2 miles by 4. The distance from the center of the WSA to the perimeter is 1-2 miles.

Drainages in the study area run east to west, opening directly into the dense concentration of developments in the Musselshell River bottoms. Vehicle sounds on the county road to the west and the sounds of farm machinery funnel directly up these drainages, affecting the solitude. A ranch is just outside the WSA (T. 17 N., R. 29 E., Section 12). There are also regularly used roads on the north, south and east sides of the unit. About 2,000 acres are adversely affected by these offsite disruptions. The WSA is also flown over by jet aircraft, averaging about eight flights daily at 4,000 feet.

Elsewhere, the unit is rugged enough to permit visitor isolation. Vegetation screening in Bridge Coulee also tends to lessen the impact of outside influences, especially in the center of the WSA. Fifty percent of the land is covered with timber, while open grasslands and eroding clay slopes make up the rest.

Hiking, rock collecting, nature photography, horseback riding and hunting are primitive recreational opportunities in this WSA. Present uses are limited to hunting (restricted by the difficulty of retrieving game and by fluctuating game populations) and occasional sightseeing by vehicle. The area has attractive scenery but it is less spectacular than the areas immediately adjacent to the Missouri River. Access into the WSA is good on graded and county roads, but is limited to dry weather from May-October.

The rough terrain limits horseback riding opportunities to the southeast and tends to channel hikers to the ridgetops and drainage bottoms. Campsites can be found in the scattered clumps of ponderosa pine but potable water is not available. Rattlesnakes might present a hazard to visitors and wet weather and snow limit

FIGURE 3.8 BRIDGE COULEE (MT-024-675) LAND STATUS/ALLOTMENT BOUNDARY MAP

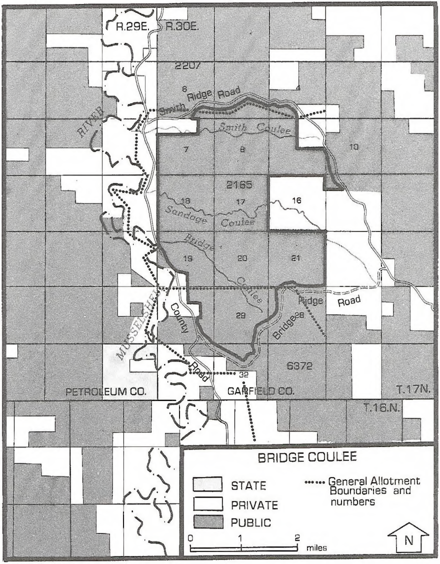

R.29E.
R.30E.
2207
6
4
Ridge Road
Smith
Smith Coulee
RIVER
7
8
10
2165
18
17
16
Sandage Coulee
Bridge
19
20
21
Coulee
MUSSELSHELL
County
Road
Ridge
Road
29
28
Bridge
6372
32
PETROLEUM CO.
GARFIELD CO.
T.17N.
T.16.N.
BRIDGE COULEE
STATE
PRIVATE
PUBLIC
General Allotment Boundaries and numbers
0
1
2
miles
N

TABLE 3.7: MANMADE FEATURES IN THE BRIDGE COULEE WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 17 N., R. 30 E. Sec. 9	Northeast corner of unit	1 Acre	Small retention reservoir near head of drainage.
2	T. 17 N., R. 30 E. Sec. 9	Northeast corner of unit	1 Acre	Small retention reservoir near head of drainage.
3	T. 17 N., R. 30 E. Sec. 9	Along east edge of unit	1 Acre	Retention reservoir in steep drainage.
4	T. 17 N., R. 30 E. Sec. 21	Along southeast edge of unit	5 Acres	Retention reservoir in large drainage.
Vehicle Ways				
1	T. 17 N., R. 30 E. Sec. 9	Leads from east edge of unit	1 Mile	Two wheel grass track that follows the top of ridge.
2	T. 17 N., R. 30 E. Sec. 21	Southeast corner of unit	.25 Mile	Two wheel grass track access to reservoir
3	T. 17 N., R. 30 E. Secs. 20, 28, & 29	Follows coulee from southeast border	1.5 Miles	Primitive two wheel track extending from the top of ridge to the bottom of drainage.
4	T. 17 N., R. 30 E. Sec. 9	Northeast corner of unit	.25 Mile	Two wheel track access to reservoirs.
Fences				
1	T. 17 N., R. 30 E. Secs. 4, 5, & 6	Follows north border of unit	2.25 Miles	Three four-strand wood/metal post barbed wire fence that follows the top of a ridge.
2	T. 17 N., R. 30 E. Secs. 28, 29, & 30	Crosses south portion of unit	2.5 Miles	Three four-strand wood/metal post barbed wire fence.

Source: BLM, 1981, 1986

travel. Although various recreational activities can be experienced in Bridge Coulee, The WSA does not offer outstanding recreational opportunities.

Supplemental Values

One value of this unit is its scenery. Bridge Coulee, Sandage Coulee and Smith Coulee run east to west, emptying into the Musselshell River. These drainages have deeply etched the open grassy benches, creating attractive river breaks scenery. Moderately dense stands of juniper and ponderosa pine grow on the steep hillsides, especially on north slopes and in sandstone soils.

The Hell Creek and Tullock Formations which contain fossils of scientific interest, are exposed. Excellent dinosaur skeletons, as well as those of early marsupials, mammals, smaller reptiles and fish have been found 50 miles northwest in these formations.

MINERALS

The Bridge Coulee WSA contains no KGSs. The WSA is 8 miles north-northeast of the Cat Creek field, which is fully developed with declining oil production. Four wells have been drilled in the surrounding nine townships (T. 16 N. through T. 18 N., by R. 29 E. through 31 E.). All were dry holes and range between 3 and 9 miles from the WSA boundary. Rice (1979) described strata of gas-bearing potential in the CMRNWR approximately 15 miles north of the WSA. Similar strata can be found in the WSA. Oil potential is rated as low and gas potential is rated as moderate. Approximately 85% (4,990 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The Bridge Coulee WSA does not contain significant coal deposits and the potential for development is low. Bentonite may occur in 3 foot beds of low quality. It would be exposed or shallow along the west boundary. The potential is low for development due to the low quality small deposits that are remote from markets.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 40 and 50. The mule deer population uses the area in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. There are no fisheries reservoirs and all drainages are intermittent (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENTS

There are two operators with grazing permits in the WSA. These operators have 668 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.8 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 100 RVDs per year. Of this use, it is estimated that no RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

MUSSELSHELL BREAKS WSA

The Musselshell Breaks WSA is approximately 8,650 acres in size, with boundaries of roads and/or state and private land on all sides. The Musselshell River roughly defines the western boundary, but much of the bottomland between the river and the WSA is privately owned (Figure 3.9).

WILDERNESS VALUES

Naturalness

In 1979, a vehicle way was extended, by blading, west through the WSA. It divides the unit into two parts of 3,900 and 4,150 acres and adversely affects the natural appearance of approximately 10% of the WSA. This way is presently eroding in steep areas and revegetating in the flats through lack of use and maintenance. The WSA contains reservoirs, fences and vehicle ways (see Table 3.8) mostly associated with livestock grazing. Because of adequate forest screening, these developments don't affect the natural appearance of the center of the unit. This is especially true in the central and southern portions. There is an underground telephone line and associated R/W next to county road along 1 mile of the eastern boundary. It is not visible.

Solitude and Primitive Recreation

This unit is rectangular in shape; 2 miles by 4½ miles with a center-to-perimeter distance of 1-2½ miles.

The study area consists of drainages that run toward irrigated fields, farm buildings and a county road bordering the Musselshell River. Nearly 40 percent of the WSA is adversely affected by offsite activities. Reflections, dust and noise penetrate at least 1/2 mile into the unit from the west, being most noticeable from the ridge lines. The drainage bottoms and forest vegetation screen most of the road activities on the east side.

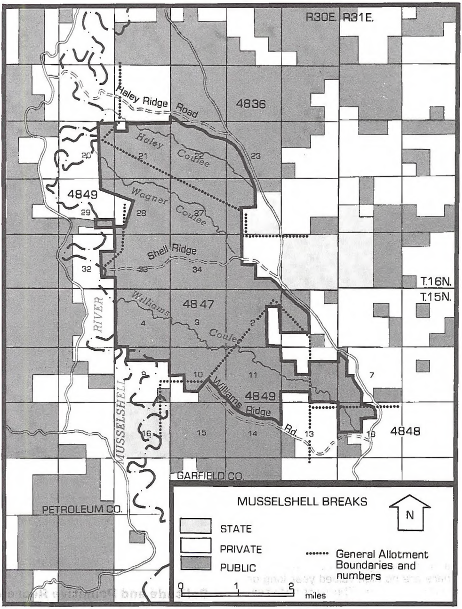
The WSA is part of a jet fighter training zone, so periodic disruptions of solitude should be expected. Only in the center core areas north and south of the bisecting road can a visitor be assured of finding solitude.

TABLE 3.8: MANMADE FEATURES IN THE MUSSELSHELL BREAKS

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 16 N., R. 30 E. Sec. 22	Northeast corner of unit	1 Acre	Small retention reservoir located within a steep drainage.
2	T. 16 N., R. 30 E. Sec. 34	Center of the unit	1 Acre	Small retention reservoir located within a steep drainage.
Vehicle Ways				
1	T. 16 N., R. 30 E. Secs. 21, 22, 26, & 27	North half of the unit	2 Miles	Unconstructed two wheel access that follows ridgetop.
2	T. 16 N., R. 30 E. Secs. 33, 34, & 35	Crosses center of unit	2.8 Miles	Constructed access from ridge to river that is visible through center of unit.
3	T. 16 N., R. 30 E. Sec. 33	The center-west edge of unit	.7 Mile	Two wheel grass track along ridge.
4	T. 16 N., R. 30 E. Sec. 34	Center of unit	.25 Mile	Two wheel grass track along ridge.
5	T. 15 N., R. 30 E. Secs. 11 & 14	Southeast edge of unit	1.5 Miles	Constructed two wheel track that follows ridge.
6	T. 15 N., R. 30 E. Sec. 10	Along south edge of unit	.25 Mile	Two wheel grass track along ridge.
Fences				
1	T. 15 N., R. 30 E. Sec. 2	Along east edge of unit	.25 Mile	Short three four-strand wooden/metal post barbed wire fence.
2	T. 16 N., R. 30 E. Sec. 34	Within center of unit	1 Mile	Three four-strand metal/wood post barbed wire fence that crosses ridge.
3	T. 16 N., R. 30 E. Sec. 34	Within center of unit	.5 Mile	Three four-strand metal/wood post barbed wire fence that follows ridge.
4	T. 16 N., R. 30 E. Secs. 34 & 35	Lies near center-east side of unit	.5 Mile	Three four-strand metal/wood post barbed wire fence that follows ridge.
5	T. 16 N., R. 30 E. Secs. 26 & 35	Borders east edge of unit	1.9 Miles	Three four-strand metal/wood post barbed wire fence that borders unit.
6	T. 16 N., R. 30 E. Secs. 21, 22, 26, & 27	Along north half of unit	2.75 Miles	Three four-strand metal/wood post barbed wire fence that follows ridge.

Source: BLM, 1981, 1986

FIGURE 3.9 MUSSELSHELL BREAKS (MT-024-677) LAND STATUS/ALLOTMENT BOUNDARY MAP


R30E.
R31E.
Haley Ridge Road
4836
Haley Coulee
20
21
22
23
4849
29
28
Wagner Coulee
27
Shell Ridge
32
33
34
T.16N.
T.15N.
Williams Coulee
4847
4
3
2
RIVER
MUSSELSHELL
9
10
11
7
4849
Williams Ridge Rd.
16
15
14
13
18
4848
GARFIELD CO.
PETROLEUM CO.
MUSSELSHELL BREAKS
N
STATE
PRIVATE
PUBLIC
General Allotment Boundaries and numbers
0
1
2
miles

Primitive recreational opportunities include horseback riding, hiking, nature photography, rock collecting and hunting. Present uses are hunting and some sightseeing from vehicles. Access is good, with graded roads to the east and west. Wet or snowy weather, however, makes the roads impassable, limiting the visitor season from May-October. Campsites may be found along the ridge lines but potable water is unavailable. This WSA is interesting to visit, but does not offer outstanding recreational opportunities.

Supplemental Values

The most notable scenic portions of this unit are found in Haley, Wagner and Williams Coulees, which open to the Musselshell River on the west boundary of the WSA. About 70 percent of the WSA is comprised of either open clay slopes or sage and prairie grasses; the remainder containing scattered ponderosa pine.

MINERALS

The Musselshell Breaks contains no KGSs. No wells have been drilled within the WSA. The Cat Creek field is as close as 2 miles to the southwest of the WSA. This field, one of the oldest in Montana, has produced since 1920 nearly 23 million barrels of oil from Cretaceous-age and older formations. Production has dropped greatly since the mid-20s, the field being in the "stripper state" since 1958, but still produced 89,000 barrels from 58 wells in 1979. The field is well defined and expansion is not expected. Two dry holes have been drilled 6 miles east of the WSA. Both oil and gas potential are rated as moderate. Approximately 43 percent (3,710 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The WSA does not contain significant coal deposits and the potential for development is low.

Bentonite exists underneath the Bearpaw Shale which is buried in this WSA. Development potential is low.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 35 and 65. The mule deer population uses the area in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. There are no fisheries reservoirs and all drainages are intermittent (Appendix 3.1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are four operators with grazing permits in the WSA. These operators have 1250 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.9 shows the allotment boundaries in the study area. There is a water pipeline and two water catchments proposed for the WSA. These proposals are preliminary, e.g. locations have not yet been reviewed by District Operation staffs, nor have archaeological or other clearances been obtained at this time.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 100 RVDs per year. Of this use, it is estimated that no RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

BILLY CREEK WSA

The 3,450-acre Billy Creek WSA, in Garfield County, is comprised of four roadless areas ranging from 80 on the north to 1,650 acres. The westernmost of the four roadless areas is contiguous on the north to the CMRNWR East Seven Blackfoot study area. The easternmost three roadless areas are contiguous to the CMRNWR Billy Creek study area. The four roadless areas were included for study due to their contiguity to the CMRNWR Study Areas, recommended as suitable by the President (Figure 3.10).

WILDERNESS VALUES

Naturalness

Scattered developments inside the WSA are associated livestock grazing. (See Table 3.9). Two reservoirs adversely affect the eastern part of Billy Creek as they are in an open area and a recent fire has burned away concealing vegetation. A fire trail 1½ miles long, also reduces naturalness in this part of the WSA. The location of most developments and the smallness of the unit dictate that boundary modifications would not significantly increase the WSA's apparent naturalness.

Solitude and Primitive Recreation

The unit is long and slender, extending 5 miles in length but only 1/2-2 miles in width. Distance from the center to the perimeter is as little as 1/4 mile in some places.

No separate portion of the WSA is big enough to contain opportunities for solitude by themselves. The two westernmost parts are composed of moderately deep drainages fringed with timber, which offer good screening.

The two easternmost parts have more rolling terrain and because of recent fires are comparatively open.

FIGURE 3.10 BILLY CREEK (MT-024-633) LAND STATUS/ALLOTMENT BOUNDARY MAP

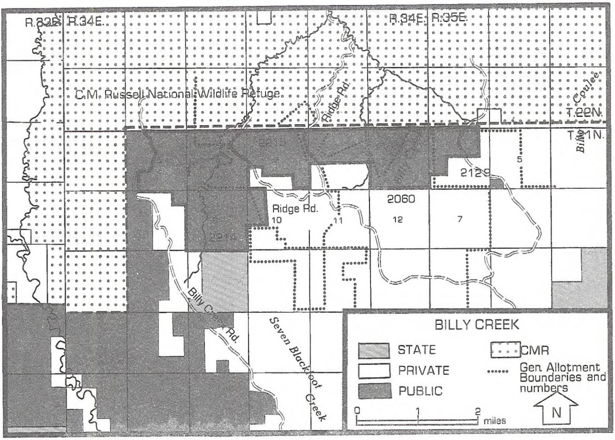

R.33E.
R.34E.
R.34E.
R.35E.
C.M. Russell National Wildlife Refuge
Ridge Rd.
Billy Coulee
T.22N.
T.21N.
2215
5
2129
2060
Ridge Rd.
10
11
12
7
9
2214
Billy Creek Rd.
Seven Blackfoot Creek
BILLY CREEK
STATE
PRIVATE
PUBLIC
CMR
Gen. Allotment Boundaries and numbers
0
1
2
miles
N

TABLE 3.9: MANMADE FEATURES IN THE BILLY CREEK WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 21 N., R. 35 E. Sec. 6	East edge	1 Acre	Very visible reservoir on edge of unit.
2	T. 21 N., R. 35 E. Sec. 6	East edge	1 Acre	Older inconspicuous reservoir.
3	T. 21 N., R. 34 E. Sec. 5	West edge	1 Acre	Reservoir built in 1973, well screened by forest vegetation.
4	T. 21 N., R. 34 E. Sec. 5	West edge	1 Acre	1960 reservoir well screened.
5	T. 21 N., R. 34 E. Sec. 5	West edge	1 Acre	1960 reservoir silted in and revegetated.
Vehicle Way				
1	T. 21 N., R. 35 E. Sec. 6 T. 21 N., R. 34 E. Sec. 1	East edge	1.25 Miles	Goes through burned off section of unit.

Source: BLM, 1981, 1986

Solitude there is highly affected by cultivated fields next door. Farm buildings and implements are audible and visible and traffic along the main county road can be seen from the south border. Two ranches (T. 21 N., R. 34 E., Section 18 and T. 21 N., R. 34 E., Section 15) are also visible from the east end of the WSA. There is occasional traffic on the roads between the parts of the unit and on the road identified as a vehicle trail in the original inventory) which enters the far eastern part for 1 mile. These distractions would be rare and fleeting, however. This WSA is also part of the jet fighter training zone where an average of eight aircraft daily fly over at 4,000 feet. Periodic disruptions of solitude throughout the unit should be expected.

About 1,200 acres of the Billy Creek WSA are adversely affected by offsite influences. Without the addition of the Charles M. Russell National Wildlife Refuge lands to the north, solitude would not be exemplary.

Primitive recreational opportunities in the WSA could include hiking, backpacking, hunting, sightseeing and nature photography. Present uses are mainly hunting and sightseeing from vehicles. Hunting is limited by the difficulty of retrieving game and by changing game populations.

Because of the dividing roads, this unit has excellent access. Rain or snow, however, limit the user season from May-October during dry periods. The finger ridges have the best campsites because of the screening ponderosa pine, the presence of firewood and gentle slopes. Drinkable water is unavailable and rattlesnakes and steep cliffs present hazards to the unwary visitor.

The two major limiting factors on recreation are the small size of the WSA and the difficulty of travel due to the broken terrain.

Supplemental Values

Supplemental values include the attractive river breaks topography. Timbered prairie grass slopes along with the muted, banded colors on the open clay slopes present a pleasant panorama towards the Fort Peck Reservoir.

Fossils in the Hell Creek and Tullock Formations exposed in the region are of value to paleontologists. Skeletons of dinosaurs and the remains of smaller reptiles, fish, early marsupials and mammals have been discovered. Two known sites are in this WSA.

MINERALS

The Billy Creek WSA contains no KGSs. The nearest KGSs are Cat Creek 40 miles southwest and Bowdoin Dome 50 miles north. Three wells, all dry holes, have been drilled in the surrounding 12 townships (T. 20 N. through T. 22 N. by R. 33 E. through R. 36 E.). Exploration is not extensive, particularly to the north due to the CMRNWR. Rice (1979) described strata of gas-bearing potential in the CMRNWR immediately north of the WSA. Oil potential is rated as low and gas potential is rated as moderate. Approximately 19 percent (640 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

Coal deposits are located in the Tullock Member of the Fort Union Formation in the unit. Bed "1" in the CMR north of the WSA appears to extend into the Billy Creek but is too thin (under 5 feet) and of too poor quality (33-52% ash, 1.1-1.4% sulphur, producing 3,250-5,590 BTU/lb.) to be considered economical with present technology and air standards (Miller et al. 1979). Therefore, the coal potential is low.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is approximately 25. The mule deer population uses the area in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. There are no fisheries reservoirs and all drainages are intermittent. The WSA is contiguous on the north boundary with the CMR. The only species identified (CMR FEIS 8/86) as having overall distribution on the CMR are mule deer and sharp-tailed grouse. Areas of habitat valuable for winter range are generally of lower elevation and not near the BLM

WSA. Elk were transplanted on the CMR north of the Missouri River in the early 1950s. Subsequently, the population has grown to 1,300 to 1,500 and some have crossed to the south side of the river. If the population grows, it is anticipated that some elk transitory use may occur in the WSA (Appendix 3-1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently three operators with grazing permits in the WSA. These operators have 371 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3-10 shows the allotment boundaries in the study area. There are no proposed projects for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 25 RVOs per year. Of this use, it is estimated that no RVOs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

SEVEN BLACKFOOT WSA

Seven Blackfoot, in northern Garfield County, consists of about 20,250 acres, divided into three roadless areas by roads. The WSA is contiguous to two Charles M. Russell National Wildlife Refuge study areas. The northeast roadless area is contiguous to the CMRNWR East Seven Blackfoot study area of 12,184 acres. The northwest roadless area is contiguous to the CMRNWR West Seven Blackfoot study area of 7,096 acres. The President has recommended that the CMRNWR areas be designated as wilderness (Figure 3.11).

WILDERNESS VALUES

Naturalness

The reservoirs, fences and vehicle ways inside this WSA are mostly associated with livestock grazing (Table 3.10). One group of very faint vehicle ways was created while getting to a recent fire. Most of the developments are concentrated in the southern half of the WSA. Many of the reservoirs are silting-in, are mostly well screened and not a substantial impact on the area's overall naturalness.

The most notable infringements on naturalness in this WSA are the bladed interior roads which divide the unit into three roadless areas. There is occasional traffic on these roads as they provide the most convenient route from the Wilson Ranch to grain fields on the east side of the WSA.

Because of the location of most developments, boundary modifications would not significantly increase the WSA's apparent naturalness. The size of Seven Blackfoot and its topographic and vegetative screening cause the apparent naturalness of the WSA to be only lightly affected by developments.

Solitude and Primitive Recreation

This WSA is at least 3½ miles wide and 6 miles long, with the distance from the center to the perimeter 2-3 miles. Except for the ridgetops, the WSA is topographically screened from most outside influences, being deeply eroded in the north, less so to the south. There is some channeling effect on visitors imposed by the drainage patterns, but the numerous side drainages would probably lessen the concentration of people in a few areas in the WSA.

Vegetation screening is good to excellent throughout, dense stands of ponderosa pine and juniper comprising almost 40% of the unit. Open, bare slopes in the south have little vegetation screening, but the rough topography of that area provides good isolation.

Solitude is adversely affected by farms and ranches around the perimeter of the WSA. During late spring, summer and fall (which coincides with the major recreational use seasons), the noises of farm implements, dust and reflections would have a significant effect on solitude, especially from ridges and high points in the south half of the WSA. Outside influences would be minimal during the winter months. Nearby ranches are noticeable, mainly from many ridgetops within the unit. These ranches are located in T. 21 N., R. 33 E., Section 20; T. 21 N., R. 33 E., Section 29; T. 20 N., R. 33 E., Section 13; T. 20 N., R. 33 E., Section 4.

This WSA is part of a jet aircraft training zone where eight flights are scheduled daily at 4,000 feet. Periodic disruptions of solitude throughout the unit should be expected from this source, as well as from traffic on roads inside the WSA.

Primitive recreational opportunities available in the WSA include hiking, hunting, horseback riding, nature photography and sightseeing. Present uses are mainly hunting and sightseeing from vehicles. Hunting quality is restricted by the difficulty of game retrieval.

Federally controlled access is from a county road near Chalk Butte, through a 1/4-mile-wide finger of land into the WSA, and from the county road to the Wilson Ranch on the northwest side. Access through private land restricts visitor use. All access ways are impassable in snowy or wet weather, limiting use to May-October in dry conditions.

The steep terrain of this WSA would make recreational activities challenging. Successful negotiation of the Seven Blackfoot WSA requires stamina and a good map, with rattlesnakes and steep cliffs adding spice to the experience. No drinkable water is available. The nature of the WSA probably would limit visitors, adding to the

FIGURE 3.11 SEVEN BLACKFOOT (MT-024-657) LAND STATUS/ALLOTMENT BOUNOARY MAP

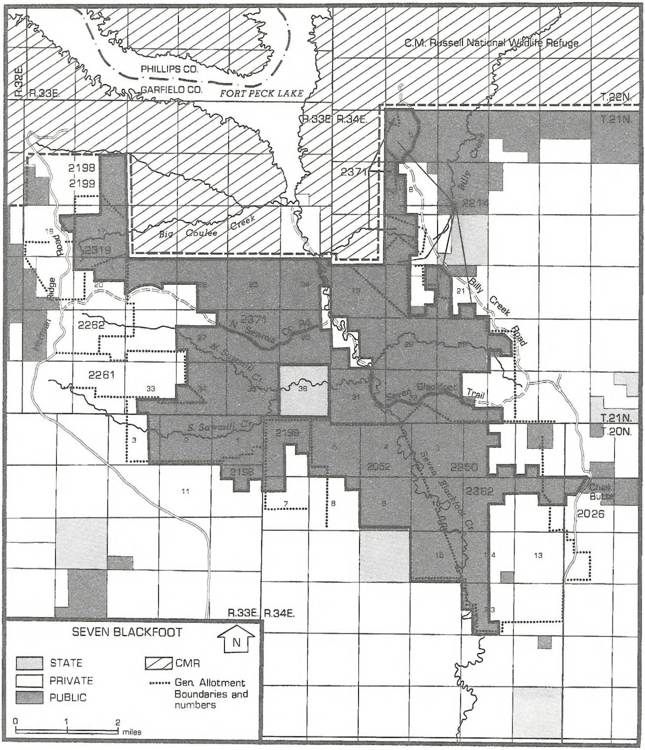

C.M. Russell National Wildlife Refuge
PHILLIPS CO.
GARFIELO CO.
FORT PECK LAKE
R.32E.
R.33E.
T.22N.
T.21N.
R.33E. R.34E.
2198
2199
2371
2214
2319
2262
2261
2371
2199
2198
2052
2250
2362
2026
Big Coulee Creek
Billy Creek
Billy Creek Road
Ridge Road
Harmon
Ridge
N. Sawmill Cr. Rd.
N. Sawmill Cr.
S. Sawmill Cr.
Seven Blackfoot Trail
Seven Blackfoot Cr.
Chalk Butte
T.21N.
T.20N.
R.33E. R.34E.
SEVEN BLACKFOOT
N
STATE
PRIVATE
PUBLIC
CMR
Gen. Allotment Boundaries and numbers
0
1
2
miles

TABLE 3.10: MANMADE FEATURES IN THE SEVEN BLACKFOOT WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 20 N., R. 34 E. Sec. 14	Southeast tip	1 Acre	Older revegetated development
2	T. 20 N., R. 34 E. Sec. 9	Southeast tip	1 Acre	Older, well screened reservoir just off ridgetop. Silted in.
3	T. 20 N., R. 34 E. Sec. 5	Near south boundary	1 Acre	Located just off ridgetop
4	T. 20 N., R. 34 E. Sec. 5	Near south boundary	1 Acre	Located within 200 yards of above
5	T. 20 N., R. 34 E. Sec. 5	Near south boundary	1 Acre	Older, small reservoir found at head of broad, grassy drainage.
6	T. 20 N., R. 34 E. Sec. 6	Near south boundary in burned-off area	1 Acre	Well screened
7	T. 21 N., R. 33 E. Sec. 35	Near south boundary in burned-off area	1 Acre	Located in bottom of Sawmill Creek
8	T. 20 N., R. 33 E. Sec. 12	Right next to south boundary	1 Acre	Found on edge of flat bench
9	T. 20 N., R. 33 E. Sec. 12	Right next to south boundary	1 Acre	On top of open ridge line
10	T. 21 N., R. 33 E. Sec. 34	Near west boundary	1 Acre	Square outline is somewhat obtrusive but only small area impacted.
11	T. 21 N., R. 33 E. Sec. 22	Northwest portion of unit	1 Acre	Older, well screened improvement found in head of drainage
12	T. 21 N., R. 33 E. Sec. 17	Northwest tip	1 Acre	Well screened by location in bottom of drainage
13	T. 21 N., R. 33 E. Sec. 8	Northwest tip	1 Acre	Well screened by location in bottom of drainage
14	T. 21 N., R. 34 E. Sec. 5	Northeast tip	1 Acre	Screened by forest vegetation
15	T. 21 N., R. 34 E. Sec. 5	Northeast tip	1 Acre	Well screened by forest vegetation
16	T. 21 N., R. 34 E. Sec. 22	Southern edge of northwest roadless area	1 Acre	Well screened by forest vegetation
17	T. 21 N., R. 33 E. Sec. 26		1 Acre	Well screened by forest vegetation
Spring Development				
1	T. 20 N., R. 34 E. Sec. 10	Southeast tip	1 Acre	Impacts limited area
2	T. 21 N., R. 34 E. Sec. 31	Southern end	1 Acre	Very inconspicuous
Vehicle Ways				
1	T. 21 N., R. 34 E. Sec. 33 T. 20 N., R. 34 E. Secs. 2, 3, 10, & 11	East side	2.75 Miles	Little used trail shows up in wooded areas but is well screened.
2	T. 20 N., R. 34 E. Sec. 14	Southeast tip	.25 Mile	Provides access to Reservoir 1
3	T. 20 N., R. 34 E. Secs. 5 & 6	Enters from south border	1.5 Miles	Possibly fire access, rapidly revegetating
4	T. 20 N., R. 34 E. Sec. 6 T. 21 N., R. 33 E. Secs. 35 & 36	Connected to the above	.5 Mile	Provides access to two reservoirs
5	T. 20 N., R. 33 E. Sec. 2	Enters from south border	.5 Mile	Ridgetop way which drops to bottom of South Sawmill Creek.
6	T. 21 N., R. 33 E. Secs. 33 & 34	Enters from west border	.75 Mile	Ridgetop road access to fence
7	T. 21 N., R. 33 E. Secs. 34 & 35	Enters from west boundary	1.25 Miles	Two track trail winding up a wood fringed ridge line.
8	T. 21 N., R. 33 E. Secs. 22, 23, & 24	Enters from west boundary near north border	2 Miles	Leaves from Wilson Ranch. Two track.
9	T. 21 N., R. 33 E. Secs. 23 & 24	Projection to CMR border from the above road	1 Mile	Hardly visible two track
10	T. 21 N., R. 34 E. Sec. 31	Projection from road paralleling Seven Blackfoot Creek	.75 Mile	Shows some use
Fences				
1	T. 20 N., R. 34 E. Sec. 2	East side	.5 Mile	Minor cross fence
2	T. 20 N., R. 34 E. Secs. 11 & 12	East side	.5 Mile	1946 fence
3	T. 20 N., R. 34 E. Sec. 11	East side	.25 Mile	Blocks drainage to cattle
4	T. 20 N., R. 34 E. Secs. 4, 9, 10, & 15	Southeast tip	4.5 Miles	Follows Seven Blackfoot Creek
5	T. 20 N., R. 34 E. Sec. 15	Southeast tip	.5 Mile	Minor cross fence
6	T. 20 N., R. 34 E. Sec. 9	South side	.25 Mile	Minor cross fence
7	T. 20 N., R. 34 E. Sec. 5	South side	.75 Mile	Four strand wood or metal fence
8	T. 20 N., R. 33 E. Sec. 1	South side	.5 Mile	Heads down to Sawmill Creek, south branch
9	T. 20 N., R. 33 E. Secs. 2 & 3 T. 21 N., R. 33 E. Secs. 33 & 34	West side	2 Miles	Allotment boundary fence
10	T. 21 N., R. 33 E. Sec. 27	West side	.5 Mile	Heads down to Sawmill Creek
11	T. 21 N., R. 33 E. Sec. 17	Northwest tip	.25 Mile	Minor cross fence

Source: BLM 1981, 1986

solitude of those who chose to come to this unit for recreation.

Supplementary Values

Values include the area's wild, broken landform. A basin is created by erosion from the creek, leaving a vista of rugged, stark cliffs offset by clumps of ponderosa pine and rolling prairie meadows. The presence of Douglas fir in the WSA, noted in the initial inventory, is an unusual occurrence this far east and may be of scientific value.

Fossils can be found in the area as the fossiliferous Hell Creek and Tullock Formations are exposed in places. Dinosaur fossils — Tyrannosaurus, Triceratops and Anatosaurus — as well as the remains of smaller reptiles and fish, and even early mammals and marsupials have been found in the region, making it of considerable paleontologic interest.

MINERALS

The Seven Blackfoot WSA contains no KGSs. The nearest KGSs are Cat Creek 35 miles to the southwest and Bowdoin Dome 50 miles to the north. Two wells, both dry holes, have been drilled in the surrounding 12 townships. (T. 20 N., through T. 22 N. by R. 32 E. through R. 35 E.). One of the two dry holes is in the southernmost portion of the northwest roadless area of the WSA. The other dry hole is 1 mile south of the WSA. Oil potential is rated as low and gas potential is rated as moderate. Approximately 15 percent (3,120 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

The coal-bearing Tullock Member of the Fort Union Formation underlies part of the Seven Blackfoot WSA. A study in the CMR next to the WSA detailed a coal deposit (the "Z" Bed) at the base of the Tullock about 2½ feet thick, with a 1½-foot parting. Tests of this coal found 60% ash content, a range of 0.5-2.4% sulphur and produced 1,980-2,630 British thermal units per pound (BTU/lb.). Reserves in the CMR were not calculated because of the high ash content and the low heating value. Several other thin beds lie higher in the member.

One small stripping operation (the Kariotis Mine) took coal for local use 0.7 miles south of the WSA. There the "Z" Bed was 3.3 feet thick (George Mowat, USGS, Personal Communication).

In general, the beds are too thin and the coal of too poor a quality to make extraction economical. The coal potential is therefore low. There is some possibility of local use.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 135 and 465. The mule deer population uses the area in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. The WSA is occupied by a transitory Merriam's Turkey population of from 30 to 100. However, the population is more generally associated with the private lands outside the WSA. There are no fisheries reservoirs and all drainages are intermittent. The WSA is contiguous on the north boundary with the CMR. The only species identified (CMR FEIS 8/76) as having overall distribution along this portion of the CMR is mule deer. Areas of habitat valuable for winter range are generally of lower elevation and not near the BLM WSA. Elk were transplanted on the CMR north of the Missouri River in the early 1950s. Subsequently, the population has grown to 1,300 to 1,500 and some have crossed to the south side of the river. If the population grows, it is anticipated that some elk transitory use may occur in the WSA (Appendix 3-1).

LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently 10 operators with grazing permits in the WSA. These operators have 1,864 animal unit months (AUMs) — the amount of feed or forage required by one mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.11 shows the allotment boundaries in the study area. There are three reservoirs and a 3-mile fence proposed for the WSA. These proposals are preliminary, e.g. locations have not yet been reviewed by District Operation staffs, nor have archaeological or other clearances been obtained.

RECREATIONAL ORV USE

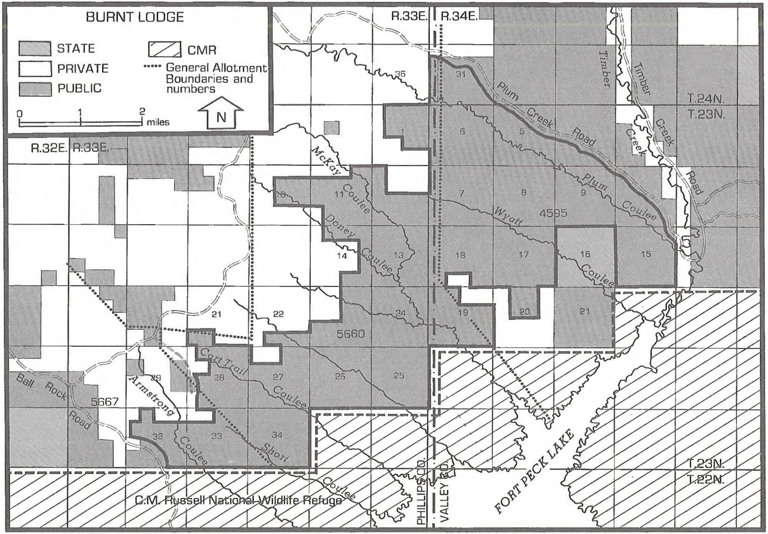
Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 200 RVDs per year. Of this use, it is estimated that 10 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

BURNT LODGE WSA

This 13,730-acre unit lies a mile north of the Fort Peck Reservoir on the Phillips-Valley County border. It is bounded by a combination of a road, private land, state land and public lands. Except for the road, the boundary is difficult to follow on the ground (Figure 3.12).

The southern border is contiguous with the Charles M. Russell National Wildlife Refuge's Burnt Lodge Wilderness Study Area (22,976 acres). The President has recommended that the CMRNWR study area be designated wilderness.

FIGURE 3.12 BURNT LODGE (MT-065-278) LAND STATUS/ALLOTMENT BOUNDARY MAP


BURNT LODGE
STATE
PRIVATE
PUBLIC
CMR
General Allotment Boundaries and numbers
0 1 2 miles
N
R.33E.
R.34E.
R.32E.
R.33E.
T.24N.
T.23N.
T.23N.
T.22N.
36
31
1
6
5
10
11
7
8
9
4595
14
13
18
17
16
15
21
22
24
19
20
21
5660
29
28
27
26
25
5667
32
33
34
Plum Creek Road
Timber
Timber Creek Road
Creek
McKay Coulee
Doney Coulee
Wyatt
Plum Coulee
Coulee
Cart Trail Coulee
Ball Rock Road
Armstrong Coulee
Short Coulee
PHILLIPS CO.
VALLEY CO.
FORT PECK LAKE
C.M. Russell National Wildlife Refuge

WILDERNESS VALUES

Naturalness

Most of this WSA has a natural appearance. Its topography and trees hide the few developments. (See Table 3.11.) The vehicle ways lie along flat ridgetops that finger into the unit from the north. Most show old signs of construction, but are seldom used and difficult to follow. A person can drop below the ridges to escape these imprints.

Developments are primarily associated with livestock grazing. The vehicle ways have their primary use for seasonal hunting or sightseeing and would revegetate naturally through lack of use. Because of the location of most manmade features, boundary modification would not significantly increase this WSA's apparent naturalness.

Solitude and Primitive Recreation

The unit is long and narrow, stretching 10 miles in length and 1/4-5 miles in width. It has a typical river breaks topography formed by tributaries that drop mostly from the northwest to the river. The steep slopes are badlands, but the majority of the area is covered with low

TABLE 3.11: MANMADE FEATURES IN THE BURNT LODGE WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 23 N., R. 33 E. Sec. 28	On Blue Ridge near west edge of unit	1 Acre	Small retention reservoir hidden by terrain.
2	T. 23 N., R. 33 E. Sec. 32	In Armstrong Coulee near west edge of unit	1 Acre	Small retention reservoir hidden by terrain.
3	T. 23 N., R. 33 E. Sec. 32	In Armstrong Coulee near west edge of unit	1 Acre	Small retention reservoir hidden by terrain.
4	T. 23 N., R. 33 E. Sec. 34	East side of Blue Ridge	1 Acre	Small retention reservoir hidden by terrain.
Vehicle Ways				
1	T. 23 N., R. 33 E. Secs. 28, 33, & 34	Along Blue Ridge	2 Miles	Primitive two wheel track that follows ridge. Shows signs of blading but is only used seasonally.
2	T. 23 N., R. 33 E. Secs. 22, 26, & 27	Along Swede Ridge	1.3 Miles	Same as above.
3	T. 23 N., R. 33 E. Sec. 23	Along Swede Ridge	1 Mile	Same as above.
4	T. 23 N., R. 33 E. Sec. 11	Near north boundary unit	1.1 Miles	Primitive two wheel track.
5	T. 23 N., R. 33 E. Secs. 12 & 13 T. 23 N., R. 34 E. Sec. 18	Through center of unit	2.8 Miles	Constructed access that shows very little use. Most of the route does not show recent maintenance. Majority of use is near the beginning of the route.
6	T. 23 N., R. 34 E. Secs. 7 & 8	South of Plum Coulee	1.1 Miles	Two wheel grass track that follows the top of a ridge.
7	T. 23 N., R. 34 E. Sec. 6	South of Plum Coulee	.6 Mile	Two wheel grass track that follows the top of a ridge.
8	T. 23 N., R. 34 E. Secs. 4, 5, 9, & 10	Along Plum Creek	2.2 Miles	Constructed access through Larb Hill to Plum Creek. The route is now seldom used and difficult to travel since a better route has been developed.
9	T. 23 N., R. 34 E. Secs. 4, 5, 8, & 9	Along Plum Creek	1 Mile	Intermittent two wheel track that follows Plum Creek.
10	T. 24 N., R. 34 E. Sec. 31	North edge of unit	.5 Mile	Primitive two wheel grass track.
Fences				
1	T. 23 N., R. 33 E. Sec. 32	West edge of unit	.25 mile	Three four-strand metal/wood post barbed wire fence.
2	T. 23 N., R. 33 E. Sec. 28	West edge of unit	1 Mile	Three four-strand metal/wood post barbed wire fence combined with natural barriers.
3	T. 23 N., R. 33 E. Secs. 11, 12, & 13 T. 23 N., R. 34 E. Secs. 7, 18, & 19	Center of unit	3 Miles	Three four-strand metal/wood post barbed wire fence combined with natural barriers.
4	T. 23 N., R. 33 E. Secs. 1 & 12 T. 23 N., R. 34 E. Sec. 6	North edge of unit	2 Miles	Same as above.

Source: BLM, 1981, 1986

that five RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

TERRY BADLANDS WSA

This WSA (42,950 acres) is west of Terry in Prairie County, along the Yellowstone River. It is divided into two roadless areas by the Calypso Trail, a road.

The WSA is bordered on the north by Montana State and private lands and a gravel county road, the south by Custer Creek, private and state land, the east by the Yellowstone River, private land and a road and the west by private and state land. (Figure 3.13)

WILDERNESS VALUES

Naturalness

Most of the study area has very rugged terrain, hiding most manmade features. The southeastern border near Crooked Creek, however, is an exposed area. Many vehicle ways and reservoirs (Table 3.12) are evident in this 2,000-acre parcel.

The Terry Scenic Overlook along the northeast boundary, is served by a well used gravel road. The overlook is marked by a sign and serviced by a cherry-stemmed road. Since the features are well screened by the topography, impacts are slight. There is a 42.55 acres Recreation and Public Purposes Act lease associate with the site.

There are 11 vehicle ways totaling 23 miles in the WSA. These often follow flat ridgetops. They affect the naturalness in about 1,500 acres of the WSA. Developments in Terry Badlands are mostly associated with livestock grazing. The vehicle ways now present aren't a major impact on naturalness and need no rehabilitation. Because of the location of most manmade features, boundary modification wouldn't increase this WSA's apparent naturalness.

Solitude and Primitive Recreation

The Terry Badlands are roughly triangular in shape, measuring approximately 10 miles across the base (along the Yellowstone River) and 8 miles from the base to the tip in the northwest corner. Center-to-perimeter distance is 4-5 miles.

The WSA is well screened by the rugged topography, except in the more open southeast portion. Sights and sounds from the highways and railway extend at least 2 miles into the unit's southern part. With the human activities in view from the ridgetops and sounds being channelled up the drainages, approximately 10% of the area is influenced by more activities.

Vegetation shielding is limited, except for patches of limber pine in the northwest, which screen some 800 acres. The scenic overlook in the extreme northeast corner is accessed by a cherry-stemmed road, but is well screened by scattered junipers and ponderosa pines.

Other adverse effects on solitude include traffic along the Calypso Trail and other trails which enter the unit, especially from the southeast. The noise, dust and reflections from occasional vehicles, however, have only local impact due to the excellent topographic screening.

The Terry Badlands are in the path of B-52 training flights; these flights are 400-800 feet off the ground and may occur daily.

Overall, solitude values are excellent due to the topographic screening, the large size of the unit and the scattered manmade features through the WSA.

Terry Badlands are accessible on the north by county roads, the east by the Yellowstone River and in the center by the Calypso Trail. The WSA is extremely rugged. Recreational opportunities are mainly hunting or sightseeing from vehicles. There is an established overlook (T. 12 N., R. 50 E., Section 2). There are several places for enjoyable overnight camping. Drinking water is unavailable, limiting the length of stay and the hiking range of backpackers. The soils are primarily gumbo and aren't passable in wet weather. Winters are harsh and the terrain limits winter sports.

Hazards such as occasional rattlesnakes, steep unstable terrain, extreme weather conditions and the lack of drinking water characterize this WSA. It is an excellent area for wilderness users who enjoy travel, back country hunting, rock and fossil collecting and the spectacular badlands scenery.

Supplemental Values

The Terry Badlands contain stands of limber pine, unusual this far east. Geologic features include sandstone bridges, table tops, spires and buttes formed by thousands of years of wind and water erosion. They give the WSA outstanding scenery. The Terry Badlands are rated moderate in potential archaeological resources with an estimated 1-4 sites per square mile. Historically, U.S Army troops carved graffiti on Sheridan Butte in the Badlands in the 1870s and dug rifle pits on a butte to the north of the WSA.

MINERALS

Although on the western edge of the petroleum-rich Williston Basin, this WSA contains no KGSs. Two test holes were drilled in the Terry Badlands, both dry. Three other dry holes have been drilled a mile or less outside the WSA boundary. Ten wells, all dry, have been drilled in the surrounding 16 townships (T. 11 N. through T. 14 N. by R. 48 E. through R. 51 E.). While subtle structural traps (common in places in the Williston Basin) may be present in the WSA, there are no known subsurface traps due to the lack of discoveries in the vicinity to date, both natural gas and oil potential are rated low. Approximately 11 percent (4,573 acres) of the WSA is under post-FLPMA lease. There are no pre-FLPMA leases. There has been a moratorium since December 31, 1982, on most types of mineral leasing.

Meadowlark Farms, Inc. (Amax) has applied for coal Preference Right Leases (PRLAs) on approximately

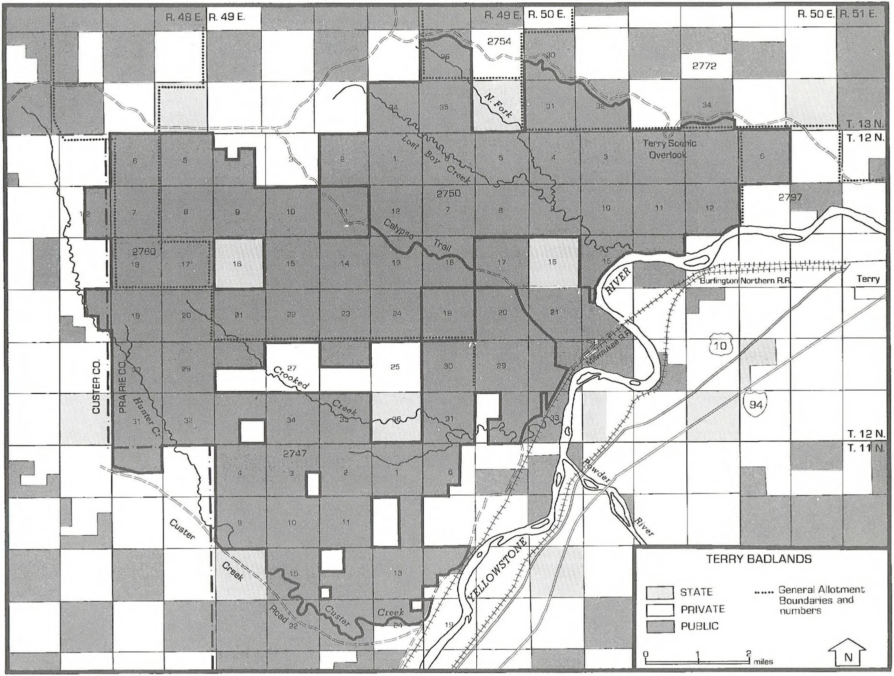

R. 48 E.
R. 49 E.
R. 49 E.
R. 50 E.
R. 50 E.
R. 51 E.
T. 13 N.
T. 12 N.
T. 12 N.
T. 11 N.
2754
2772
2750
2797
2780
2747
N. Fork
Lost Boy Creek
Calypso Trail
Terry Scenic Overlook
Crooked Creek
Hunter Cr.
CUSTER CO.
PRAIRIE CO.
Custer Creek
Road 22
RIVER
YELLOWSTONE
Powder River
Burlington Northern R.R.
Milwaukee R.R.
Terry
10
94
TERRY BADLANDS
STATE
PRIVATE
PUBLIC
General Allotment Boundaries and numbers
0
1
2
miles
N

FIGURE 3.13 TERRY BADLANDS (MT-024-684) LAND STATUS/ALLOTMENT BOUNDARY MAP

TABLE 3.12: MANMADE FEATURES IN THE TERRY BADLANDS WSA

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Reservoirs				
1	T. 12 N., R. 49 E. Sec. 5	Northwest corner	2 Acres	Small reservoir in head of drainage. Well screened.
2	T. 12 N., R. 49 E. Sec. 7	Northwest corner	5 Acres	Silted in reservoir.
3	T. 12 N., R. 49 E. Sec. 8	Northwest corner	2 Acres	Small reservoir at head of drainage.
4	T. 12 N., R. 49 E. Sec. 9	Northwest corner	5 Acres	Very poor condition. To be replaced by well.
5	T. 12 N., R. 49 E. Sec. 10	Northwest corner	2 Acres	Small reservoir in head of drainage. Well screened.
6	T. 12 N., R. 49 E. Sec. 17	Northwest corner	10 Acres	Stoney reservoir. Well screened in rugged drainage.
7	T. 12 N., R. 49 E. Sec. 19	West side	20 Acres	Large reservoir in open drainage.
8	T. 12 N., R. 49 E. Sec. 20	West side	2 Acres	Small reservoir in rolling breaks.
9	T. 12 N., R. 49 E. Sec. 22	Center of unit	5 Acres	Silted in reservoir in rough terrain.
10	T. 12 N., R. 49 E. Sec. 29	West side	10 Acres	Good condition. Head of drainage.
11	T. 12 N., R. 49 E. Sec. 32	West side	20 Acres	Hunter Reservoir; abandoned; washed out.
12	T. 11 N., R. 49 E. Sec. 2	South-central part of unit	5 Acres	1953 reservoir. In rolling terrain.
13	T. 11 N., R. 49 E. Sec. 9	South side	2 Acres	Small reservoir in drainage bottom.
14	T. 11 N., R. 49 E. Sec. 12	Southeast corner	5 Acres	Reservoir in open terrain along unit boundary.
15	T. 11 N., R. 49 E. Sec. 13	Southeast corner	5 Acres	Built in 1954. Located in open drainage.
16	T. 11 N., R. 50 E. Sec. 6	Southeast corner	5 Acres	Open terrain surrounding.
Spring Developments				
1	T. 12 N., R. 49 E. Sec. 5	Northwest corner	1 Acre	Screened area.
2	T. 12 N., R. 49 E. Sec. 1	North side	1 Acre	Bootlegger Spring. Built 1967.
3	T. 12 N., R. 49 E. Sec. 2	North side	1 Acre	Old spring with servicing trail.
4	T. 12 N., R. 49 E. Sec. 10	North side	1 Acre	Old spring serviced by way of Calypso Trail.
5	T. 12 N., R. 50 E. Sec. 18	Central in the unit	1 Acre	Good condition. Calypso Spring.
Wells				
1	T. 12 N., R. 49 E. Sec. 5	Northwest corner	1 Acre	Screened area.
2	T. 12 N., R. 49 E. Sec. 7	Northwest corner	1 Acre	Screened area.
3	T. 12 N., R. 49 E. Sec. 26	Center of unit	1 Acre	Chart Well drilled in 1972.
4	T. 12 N., R. 49 E. Sec. 35	Center of unit	1 Acre	Haughain Well 2 built in 1937.
5	T. 12 N., R. 50 E. Sec. 4	North side	1 Acre	Built in 1973. Possibly potable.
6	T. 12 N., R. 50 E. Sec. 28	East side	1 Acre	Right off Calypso Trail. Located on edge of WSA.
7	T. 12 N., R. 50 E. Sec. 31	East side	1 Acre	Train Well. Drilled by BLM, 1962.
8	T. 12 N., R. 50 E. Sec. 32	East side	1 Acre	Swank Well. Possibly potable.
9	T. 12 N. R. 50 E. Sec. 29 & 32	South	1 Acre	Deer Creek Well and associated 1.5 mile pipeline.
Vehicle Ways				
1	T. 12 N., R. 49 E. Secs. 1 & 2	Northwest edge	1.5 Miles	No Miles City DO project number. Services two developed springs.
2	T. 12 N., R. 49 E. Secs. 4, 5, 9, & 10	Northwest edge	3 Miles	No Miles City DO project number. Access to spring.

TABLE 3.12: CONTINUED

Feature	Legal Description	Location Within Unit	Approximate Length/Area	Remarks
Vehicle Ways (Continued)				
3	T. 12 N., R. 49 E. Secs. 5, 8, & 17	Northwest corner	3 Miles	Follows Crooked Creek drainage. Access to state section.
4	T. 12 N., R. 49 E. Secs. 6 & 8	Northwest corner	2 Miles	Ridgetop two track.
5	T. 12 N., R. 49 E. Secs. 31 & 32	West side	.75 Mile	Access old reservoir.
6	T. 12 N., R. 49 E. Secs. 20, 28, 29, 30, 31, & 32	West side	3.75 Miles	Jeep trail which provides access to several reservoirs and two cross fences.
7	T. 11 N., R. 49 E. Secs. 12 & 13 T. 11 N., R. 50 E. Sec. 18	Southeast edge	1.5 Miles	Provides access to a reservoir.
8	T. 11 N., R. 50 E. Sec. 18	Southeast edge	.25 Mile	Provides access to a fence.
9	T. 11 N., R. 50 E. Secs. 30, 31, & 32	East side	2 Miles	Continuation of trail mentioned above, T. 11 N., R. 50 E., Sec. 18.
10	T. 11 N., R. 49 E. Secs. 1 & 2 T. 11 N., R. 50 E. Sec. 6 T. 12 N., R. 49 E. Sec. 35	East-central portion	2.5 Miles	Provides access to a well and reservoir; two forks included.
11	T. 11 N., R. 49 E. Secs. 6 & 12 T. 12 N., R. 49 E. Sec. 26 T. 12 N., R. 50 E. Sec. 31	East-central portion	2.75 Miles	Passes through state and private land. Provides access to a well and reservoir.
Motorcycle Trail				
1	T. 12 N., R. 50 E. Secs. 15 & 21	East edge of unit	1.5 Miles	Trail goes up Lost Boy Creek and connects with Sullivan Creek.
Fences				
1	T. 13 N., R. 49 E. Secs. 34 & 35	North side	.25 Mile	Short cross fence.
2	T. 13 N., R. 49 E. Sec. 26	North side	1 Mile	Four strand wood/steel post fence.
3	T. 12 N., R. 49 E. Secs. 6, 7, 18, 19, 30, 31, & 32	Follows west boundary	8 Miles	Forms entire west boundary.
4	T. 12 N., R. 49 E. Secs. 17 & 18	Goes in from west boundary	2 Miles	Four strand wood post.
5	T. 11 N., R. 49 E. Secs. 14 & 23	South edge	1.5 Miles	Four strand wood post.
6	T. 11 N., R. 50 E. Secs. 18 & 19	Southeast corner	1 Mile	Forms southeast boundary.
7	T. 12 N., R. 50 E. Secs. 28, 32, & 33	East side	2 Miles	Forms part of the east boundary.
8	T. 12 N., R. 49 E. Secs. 4 & 5	Northwest side	.25 Mile	Forms part of northeast boundary.
9	T. 12 N., R. 49 E. Sec. 21	West-central portion of unit	.25 Mile	Cross fence in coulee bottom.
10	T. 12 N., R. 49 E. Sec. 28	West-central portion of unit	.25 Mile	Cross fence in coulee bottom.
Cherry-stemmed Road				
1	T. 12 N., R. 50 E. Sec. 2	Northeast corner of unit	.2 Mile	Access to scenic overlook.

Source: BLM, 1981, 1986

6,640 acres within this WSA (Figure 3.14). As part of the leasing process, the corporation had to prove to USGS that coal lay in sufficient quantities under the Terry Badlands to warrant mining. The coal considered for mining in the PRLA is the "U" Bed (or "Big Dirty") which marks the base of the Lebo Member in the Fort Union Formation, exposed in the southeastern part of the WSA. Amax estimated that the "U" Bed, where it was over 10 feet thick, held 163 million tons of coal under less than 150 feet of overburden. The average sample Amax obtained from lignite in this bed showed 31.18 percent fixed carbon, 25.37 percent volatiles, 0.32 percent sulphur, 17.9 percent ash (high compared to other coal in the Fort Union Formation that runs between 5-10 percent ash content), producing 6,513 BTUs/lb. There is an additional 960 acres of non-PRLA coal within inholdings.

There are discrepancies between Amax's study and one by USGS which reviewed the initial showing. Amax still has to prove commercial quantities of coal exist before the lands will be leased.

The "H-J" Bed covers about 600 acres in the northwestern corner of the WSA in the Tongue River Member. (See Figure 3.1.) This bed is estimated to contain coal 10-15 feet thick under less than 150 feet of overburden, which would amount to reserves of 10-15 million tons. The "H-J" zone has not been tested yet, but is thought to be of higher quality than that of the "U" Bed, since coal from the Tongue River Member usually is better than that from the Lebo.

The USGS has conducted coal drilling and coring in the Terry Badlands which should better delineate reserves. Current information indicates the "U" Bed is between 17-33 feet thick in the vicinity of the PRLA (USGS, Preliminary Geologic Report — Terry Badlands Wilderness Study Area, 1982).

The coal, being lignitic, would most likely have to be used for mine-mouth conversion into electricity (such as at Colstrip), into synthetic fuels or coal gasification. Present air standards would tend to discourage conversion.

Coal of much better quality and much more accessible lies throughout the region. While coal in the "U" Bed lies a few miles from the Yellowstone River and from rail transportation, reserves in the "H-J" Bed are more remote and would therefore be more difficult to transport. The coal potential of this unit is thus rated moderate.

GAME & FISHERIES POPULATIONS

Mule deer are the most abundant and important big game species in the WSA. The estimated population of mule deer is between 100 and 170. The mule deer population uses the are in the spring, summer, and fall as general habitat. There are no high valued year long or severe winter concentration areas. Due to the large size of the WSA, rather than high population densities, the grouse population is large. There are between 25 and 100 sage grouse, 25 to 60 sharp-tailed grouse and 30 to 70 hungarian partridge. There are no known leks. All drainages in the area are intermittent and there are no fisheries reservoirs.

Although the antelope population is not normally distributed in the WSA, there is approximately 5,000 acres in the eastern portion of the WSA which might serve as winter range (Appendix 3.1).

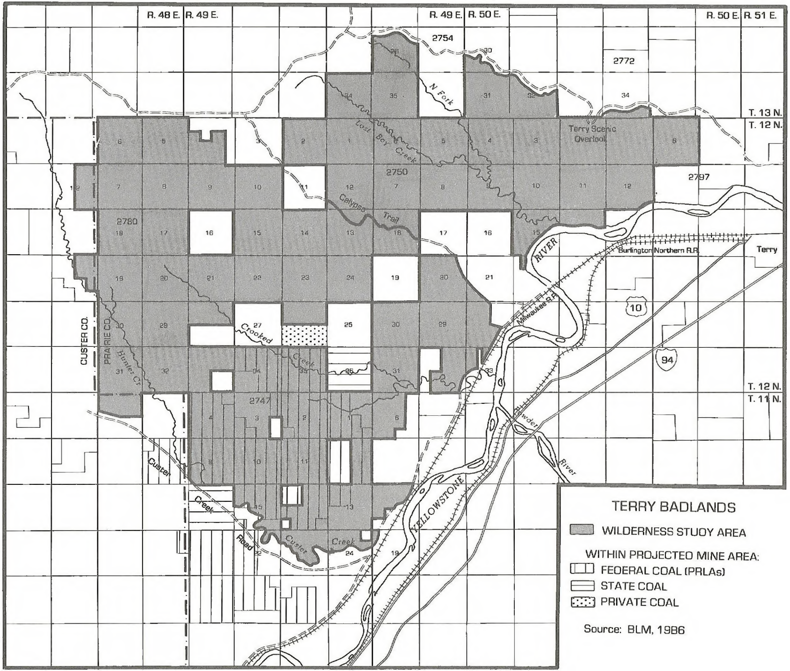
LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT

There are presently six operators with grazing permits in the WSA. These operators have 5,267 animal unit months (AUMs) — the amount of feed or forage required by one, mature 1,000-pound cow or the equivalent for one month of grazing privileges inside the WSA. Appendix 3.4 gives the allotment name and number, seasons-of-use and AUMs in the WSA. Figure 3.13 shows the allotment boundaries in the study area. There are no range projects proposed for the WSA.

RECREATIONAL ORV USE

Off-road vehicle (ORV) use is generally by 4-wheel drive vehicle. A number of 2-wheel tracks along the major ridgetops attest to ORV travel. Vehicle use increases substantially during big game hunting season. However, use also is associated with rock collecting and viewing scenery. Levels of recreational ORV use are estimated to be 400 RVDs per year. Of this use, it is estimated that 15 RVDs are by elderly or handicapped individuals who rely on motorized vehicles for access to the WSA.

FIGURE 3.14: TERRY BADLANDS WILDERNESS STUDY AREA (WSA) AND PROJECTED MINE AREA


R. 48 E.
R. 49 E.
R. 49 E.
R. 50 E.
R. 50 E.
R. 51 E.
T. 13 N.
T. 12 N.
T. 12 N.
T. 11 N.
2754
2772
2750
2797
2780
2747
N Fork
Lost Boy Creek
Calypso Trail
Terry Scenic Overlook
Terry
Burlington Northern R.R.
Milwaukee R.R.
RIVER
YELLOWSTONE
Powder River
10
94
CUSTER CO.
PRARIE CO.
Hunter Cr.
Crooked Creek
Custer Creek Road
Custer Creek
TERRY BADLANDS
▨ WILDERNESS STUDY AREA
WITHIN PROJECTED MINE AREA:
FEDERAL COAL (PRLAs)
STATE COAL
PRIVATE COAL

Source: BLM, 1986

FOUR

ENVIRONMENTAL CONSEQUENCES

This chapter evaluates the environmental and socioeconomic impacts of the issue actions presented in Chapter 2. The impacts are analyzed under each alternative by WSA with the proposed action presented first followed by the alternatives.

The westernmost six WSAs are each partially within the Upper Missouri Wild and Scenic River (UMWSR) corridor. These six WSAs are Dog Creek South, Stafford, Ervin Ridge, Woodhawk, Cow Creek, and Antelope Creek. This corridor generally includes much of the breaks associated with the WSAs. The portions of the WSAs which are outside of the corridor are less rugged terrain.

DOG CREEK SOUTH — PROPOSED ACTION (NO WILDERNESS/ NO ACTION ALTERNATIVE)

Under the proposed action, the entire 5,150 acres of Dog Creek South would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

Dog Creek South WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain.

Based on the oil and gas development scenario, two gas wells would be drilled in the 1,248 acres of the WSA outside of the UMWSR corridor within the southernmost corner of the WSA. One well would be a dry hole. The impact on naturalness would be due to the well head at the successful well and the vegetative contrast on 3.2 acres of two reclaimed well pads and 1 mile of underground pipeline. At the well head there would be a 3-foot high pipe and valves (Christmas tree), which would be visible from 1/4 mile along portions of ridges to the northeast. The 1 mile of road would be very apparent from the adjacent ridges. Since virtually all of the WSA would be screened by a ridge or below these developments, they would be apparent from 15 percent of the WSA in the southwesternmost portion.

The existing range improvements (four reservoirs and two fences) are well screened by the heavily dissected topography. They are apparent only in their immediate vicinity.

Use of motorized vehicles to manage livestock would occur along 5.75 miles of vehicle ways and 1 mile of gas well road. Recreational ORV use occurs on the existing 5.75 miles of vehicle ways in the WSA. The additional 1 mile of road associated with gas development would not increase the 150 RVD's level of recreational ORV use. However, it would disperse approximately 15 percent of it to the southwest portion of the WSA. This passage of motorized vehicles would maintain their nonvegetated condition, which would continue to reduce the naturalness in the southern and northern portions.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the central and eastern portions of the WSA due to topographic screening. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use.

During the 2-month period that each well is being drilled, there would be a drill rig and associated equipment which would be very apparent from the WSA.

The activity associated with developing two gas wells would reduce solitude in the southwestern portion of the WSA. This impact would occur during the 2 months that each well was being drilled. This affects the southwestern 20 percent of the WSA.

Motorized vehicle use to manage livestock would continue to occur once weekly. This would impact solitude along the northern and southeastern boundaries. Maintenance of fences using motorized vehicles occur annually and reservoir maintenance occurs less frequently. Recreational ORV use of 150 RVDs annually would continue. Most of this use is during fall mule deer hunting season but averages approximately 10 percent of the year. These activities detract from the feeling of solitude along the northern 10 percent and southern 15 percent of the WSA approximately 20 percent of the time.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting and, to a lesser extent, camping along the UMWSR by boat users.

The noise associated with gas well development and ORV use would diminish the primitive recreation opportunities in the vicinity of the two gas wells and along the 6.75 miles of vehicle ways and roads.

Supplemental Values

The area contains a remnant from the homesteading era and is next to the PN Ranch, which is important to the history of the area.

No actions would impact these values.

Conclusion — The naturalness of the area would be reduced on 15 percent of the WSA in the southwestern corner by gas well facilities. Opportunities for solitude and primitive unconfined recreation would be reduced on 20 percent of the WSA by gas drilling activities.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, two gas wells would be drilled in the 1,248 acres outside of the UMWSR, but within the WSA.

Conclusion — There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 20 to 80.

During each of the 2-month periods that two gas wells are drilled, mule deer would be displaced out of the southwestern corner of the WSA.

Current levels of livestock management and existing range improvement maintenance would continue. Recreational ORV use, particularly that which is associated with mule deer hunting, would continue unchanged.

As a result, the mule deer population is expected to continue at a level of between 20 and 80.

Conclusion — Mule deer population levels would not be impacted.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect two fences and four reservoirs. Maintenance of the four reservoirs using heavy equipment would continue.

Conclusion — There would be no impact on livestock management or the maintenance of range projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would continue at approximately 150 RVDs annually, which includes approximately five RVDs of vehicle dependent visits.

Conclusion — There would be no impacts on levels of recreational ORV use.

DOG CREEK SOUTH — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 5,150 acres of the Dog Creek South WSA would be recommended as suitable for wilderness designation. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Dog Creek South WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain.

Checking livestock and inspecting fence would be done on foot or on horseback.

Motorized equipment would be used annually for, if necessary, hauling fencing supplies and every 20 years to maintain four reservoirs.

This level of use of motorized equipment for the maintenance of range facilities would not maintain the non-vegetated appearance of vehicle ways. As a result, the 5.75 miles of vehicle ways would revegetate. The elimination of the line forms would enhance naturalness on 25 percent of the area along the northern and southern boundaries.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the central and eastern portions of the unit due to topographic screening. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use.

Motorized equipment would be used every 20 years to maintain four reservoirs and annually for hauling fence supplies. Checking livestock and inspecting fence would be done on foot or horseback. These activities detract from feelings of solitude along the northern 10 percent and southern 15 percent of the WSA approximately 1 percent of the time.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting and, to a lesser extent, camping along UMWSR by boat users.

The use of motorized vehicles used to maintain reservoirs and haul fence supplies would diminish primitive recreation opportunities. This would occur on an annual basis (approximately 1 percent of the time) in the vicinity of the existing fences and reservoirs.

Supplemental Values

The area contains a remnant from the homesteading era and is next to the PN Ranch, which is important to the history of the area.

No actions would impact these values.

Conclusion — The naturalness of 25 percent of the WSA would be enhanced by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced by the elimination of recreational ORV use and reduction of mechanized equipment use for range development maintenance.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, two gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — The opportunity to drill two gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 20 to 80.

The closures of 5.75 miles of vehicle way would reduce hunting pressure for mule deer in the northern portion of the area. Hunting pressure along the western and southern boundaries would continue due to vehicle access around the outside of the periphery. The net effect of the reduction in hunting pressure is that mule deer population levels are expected to increase to 22 to 90.

Conclusion — Mule deer population levels would increase from a range of 20 to 80 to a range of 22 to 88.

IMPACTS ON LIVESTOCK CHECKING AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock, inspection of four reservoirs and two fences would be done on foot or horseback using hand tools. Maintenance of the four reservoirs would be done every 20 years using heavy equipment. Approximately one half the fence is along the boundary and so could be maintained with little additional time or expense. Nevertheless, 75 additional hours of labor annually would be required. This would also result in an additional expense of approximately $275 to the three permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the three permittees would incur additional costs of $275 and 75 hours of labor time annually.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would be prohibited. As a result, use would decline from 150 RVDs, including five RVDs of vehicle dependent visits, to zero. Most of this use would be absorbed on other lands.

Conclusion — Recreational ORV use would decline from 150 RVDs to zero.

STAFFORD — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action the entire 4,800 acres would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

Stafford WSA appears natural. The developments are located on the periphery of the WSA and are well screened by rugged terrain.

Based on the oil and gas scenario, two gas wells would be drilled in the 454 acres outside of the UMWSR corridor in the north central portion of the WSA. One well would be a dry hole. The impact on naturalness would be due to the well head at the successful well and the vegetative contrast on the 3.2 acres of reclaimed well pads and 1 mile of underground pipeline. At the successful well head there would be a 3 foot high pipe and valves (Christmas tree) that would be visible from 1/2 mile along the ridgetops. These developments would reduce the naturalness on 5 percent of the WSA.

The existing range improvements include a reservoir and five fences. The reservoir is well screened by topography. Most of the 5 miles of fence lies along the boundary of the WSA. They are substantially unnoticeable. Checking livestock and inspecting range projects would continue weekly. Recreational ORV use occurs on the entire 2.25 miles of vehicle ways. The 1 mile of gas well road would not increase the 75 RVDs of use. However, it would disperse the use more evenly along the northern edge of the WSA. This passage of motorized vehicles along 2.25 miles of vehicle ways and 1 mile of gas well road would maintain their nonvegetated condition. These line forms would reduce naturalness that would be apparent for approximately 15 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Stafford WSA has outstanding opportunities for solitude due to extensive topographic screening.

During the 2-month period that each well is being drilled, there would be drill rigs and associated equipment which would be apparent from the ridges of the central third of the WSA. Activity associated with developing two gas wells would reduce solitude in the north central portion of the unit. The WSA is disected, except for small well-screened benches along the northern boundary. This would impact solitude over the northern 10 percent of the WSA during the 2 months that each well was being drilled.

Use of motorized vehicles to manage livestock would continue to occur weekly. Maintenance of fences using motorized vehicles occur annually and maintenance of the one reservoir occurs less frequently. These activities do not detract from feelings of solitude because virtually all activity is along the northern border of the WSA. Recreational ORV use of 75 RVDs annually would continue. Most of this use is during fall mule deer hunting season and averages less than 10 percent of the year. This use detracts from feelings of solitude along the 2.25 miles of vehicles ways and 1 mile of gas well road. The feelings of solitude would be reduced along a narrow strip along the northern border.

The WSA does not have outstanding opportunities for primitive and unconfined recreation.

The activity and noise associated with gas well development and ORV use would diminish primitive recreation opportunities in the vicinity of vehicle ways and developments.

Supplemental Values

No actions would affect the scenic and historic values of the WSA.

Conclusion — The naturalness and solitude of area would be reduced by gas development on 10 percent of the WSA in the northcentral portion by gas well facilities.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas scenario, two gas wells would be drilled in the 454 acres outside of the UMWSR, but within the WSA.

Conclusion — There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 20 to 90.

During each of the 2-month periods that two gas wells are developed, mule deer would be displaced out of the north central portion of the WSA.

Current levels of livestock management and existing range improvement would continue.

Recreational ORV use, particularly that which is associated with mule deer hunting, would continue unchanged.

As a result, the mule deer population is expected to continue at a level of between 20 and 90.

Conclusion — Mule deer population levels would not be impacted.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect five fences and one reservoir. Maintenance of the reservoir using heavy equipment would continue.

Conclusion — There would be no impact on livestock checking or range development maintenance levels.

IMPACTS ON RECREATIONAL ORV USE

Recreational ORV use would continue at approximately 75 RVDs annually.

Conclusion — There would be no impact on levels of recreational ORV use.

STAFFORD — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 4,800 acres of the Stafford WSA would be recommended as suitable. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Stafford WSA appears natural. The developments are located on the periphery of the WSA and are well screened by rugged terrain.

Motorized equipment would be used annually for hauling fencing supplies annually and every 20 years to maintain one reservoir. Checking livestock and inspecting fence would be done on foot or horseback.

The passage of motorized vehicles would no longer be sufficient to maintain vehicle ways. As a result, 2.25 miles of vehicle ways would revegetate to an apparently natural condition. Naturalness would increase on 10 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Stafford WSA has outstanding opportunities for solitude due to extensive topographic screening. Motorized equipment would be used to haul, for example, fencing supplies and salt. Heavy equipment would be used every 20 years to maintain the one reservoir, which is on the northern boundary. These decreases in motor vehicle use would enhance feelings of solitude on 10 percent of the WSA.

The opportunities for primitive recreation would improve due to the elimination or ORV use along existing vehicle ways. Opportunities for primitive recreation in the remainder of the WSA would remain unchanged.

Supplemental Values

No actions would occur which affect the scenic and historic values of the WSA.

Conclusion — The naturalness of the Stafford WSA would increase on 10 percent of the WSA due to the revegetation of 2.25 miles of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on 20 percent of the WSA.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Two gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — The opportunity to drill two gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 20 to 90.

The closures of 2.25 miles of vehicle ways would reduce hunting pressure for mule deer along the eastern, western and northern boundaries. Since the area is a thin strip with adequate access to the northern border, this reduction would only occur in the roughest country along the southern third of the unit. The range of mule deer population levels is expected to increase to 22 to 100 mule deer.

Conclusion — Mule deer population' levels would increase from a range of 20 to 90 to a range of 22 to 100.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock and inspection of the one reservoir and 5 miles of fence would be done on foot or horseback using hand tools. Maintenance of the one reservoir would be done every 20 years using heavy equipment. Most fence is along the boundary of the Stafford WSA and so could be maintained with little additional time. Nevertheless, 35 additional hours of labor annually would be required. This would also result in an additional expense of approximately $130 to the permittee. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the permittee would incur additional costs of $130 annually and 35 hours of labor time.

IMPACTS ON RECREATIONAL ORV USE LEVELS

The prohibition of recreational use would result in no RVDS of ORV use. Much of this use would be absorbed on other nearby lands.

Conclusion — Recreational ORV use would decline from 75 RVDs to zero.

ERVIN RIDGE — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action, the entire 10,200 acres of Ervin Ridge would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

Ervin Ridge WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain.

Based on the oil and gas development scenario, eight gas wells would be drilled in the 5,139 acres of the WSA outside of the UMWSR corridor along the northern boundary. Three of the wells would be successful and five would be dry holes. The impact on naturalness would be due to the well head of the successful wells and the vegetative contrast on 14 acres of eight reclaimed well pads and 5 miles of underground pipeline. At each well head there would be a 3-foot high pipe and valves (Christmas tree), which would be visible from 1/4 mile along portions of ridges. These developments would be along the northern boundary and concentrated in the western end of the WSA. They reduce the naturalness on 25 percent of the WSA.

The existing range improvements (12 reservoirs and 2 fences) are well screened by the heavily dissected topography. They are apparent only in their immediate vicinity.

Use of motorized vehicles to manage livestock would occur along 4.25 miles of vehicle ways and 4 miles of gas well road associated with the three successful wells. Recreational ORV use occurs on the existing 4.25 miles of vehicle ways in the WSA. The additional 4 miles of road associated with successful gas well development would not increase the 100 RVD's level of recreational ORV use. However, it would spread it all along the northern boundary of the WSA. This passage of motorized vehicles would maintain their nonvegetated condition, which would continue to reduce the naturalness of the WSA.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the southeastern portion of the WSA due to topographic screening. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use, including use along the two cherry-stemmed roads.

During the 2-month period that each well is being drilled, there would be a drill rig and associated equipment which would be very apparent from the WSA.

The activity associated with developing eight gas wells would reduce solitude along the northern portion of the WSA. This impact would occur during the 2 months that each well was being drilled. The reduction in solitude would affect 35 percent of the WSA.

Motorized vehicle use to manage livestock would continue to occur once weekly. This would impact solitude along the northern and western boundaries. Maintenance of fences using motorized vehicles occur annually and reservoir maintenance occurs less frequently. These activities detract from the feeling of solitude along the northern 25 percent of the WSA approximately 10 percent of the time.

Recreational ORV use of 100 RVDs annually would continue. Most of this use is during fall mule deer hunting season but averages approximately 10 percent of the year. This detracts from the feeling of solitude along the two cherry-stemmed roads, 4.25 miles of vehicle ways and 6 miles (two existing, four projected) of gas well road. The activity associated with gas development and motorized vehicle use cumulatively would reduce solitude on 45 percent of the WSA.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting and, to a lesser extent, camping along the UMWSR by boat users.

The noise associated with gas well development and ORV use would diminish the primitive recreation opportunities in the vicinity of the gas wells and along the 4.25 miles of vehicle ways and roads all along the northern boundary.

Supplemental Values

The area contains remnants from the homesteading era.

No actions would impact these values.

Conclusion — The naturalness of area would be reduced on 25 percent of the area along the western and northern boundaries due to gas well development. Opportunities for solitude and primitive and unconfined recreation would be reduced 25 percent by gas development activities.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, eight gas wells would be drilled in the 5,139 acres outside of the UMWSR, but within the WSA.

Conclusion — There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 40 to 160.

During each of the 2-month periods that eight gas wells are drilled, mule deer would be displaced temporarily out of the northern portion of the WSA.

Current levels of livestock management and existing range improvement maintenance would continue. Recreational ORV use, particularly that which is associated with mule deer hunting, would continue unchanged.

As a result, the mule deer population is expected to continue at a level of between 40 and 160.

Conclusion — Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect 2 fences and 12 reservoirs. Maintenance of the 12 reservoirs using heavy equipment would continue.

Conclusion — There would be no impact on livestock management or the maintenance of range projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would continue at approximately 100 RVDs annually, which includes approximately two RVDs of vehicle dependent visits.

Conclusion — There would be no impacts on levels of recreational ORV use.

ERVIN RIDGE — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 10,200 acres of the Ervin Ridge WSA would be recommended as suitable for wilderness designation. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Ervin Ridge WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain.

Checking livestock and inspecting fence would be done on foot or on horseback.

Motorized equipment would be used annually for, if necessary, hauling fencing supplies and every 20 years to maintain 11 reservoirs.

This level of use of motorized equipment for the maintenance of range facilities would not maintain the non-vegetated appearance of vehicle ways. As a result the 4.25 miles of vehicle ways would revegetate. The elimination of the line forms would enhance naturalness on 20 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the southeastern portion of the WSA due to topographic screening. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use, including use along the two cherry-stemmed roads.

Motorized equipment would be used every 20 years to maintain reservoirs and annually for hauling fence supplies. Checking livestock and inspecting fence would be done on foot or horseback. These activities detract from feelings of solitude along the northern boundary of the WSA approximately 1 percent of the time.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting.

The noise of motorized vehicles used along the two cherry-stemmed roads and to maintain reservoirs and haul fence supplies would diminish primitive recreation opportunities. This would occur on an annual basis in the vicinity of the existing fences and reservoirs, which are along the north edge of the WSA.

Supplemental Values

The area contain remnants from the homesteading era.

No actions would impact these values.

Conclusion — The naturalness of 20 percent along the northern boundary of the WSA would be enhanced by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced on 25 percent of the WSA due to the elimination of recreational ORV use and reduction of mechanized equipment for range development maintenance.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, eight gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — The opportunity to drill eight gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 40 to 160.

The closures of 4.25 miles of vehicle way would reduce hunting pressure for mule deer in the northern portion of the area. Hunting pressure along the northern and western boundaries would continue due to vehicle access around the outside of the periphery. The net effect of the reduction in hunting pressure is that mule deer population levels are expected to increase to 45 to 175.

Conclusion — Mule deer population levels would increase from a range of 40 to 160 to a range of 45 to 175.

IMPACTS ON LIVESTOCK CHECKING AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock, inspection of 11 reservoirs and 2 fences would be done on foot or horseback using hand tools. Maintenance of the four reservoirs would be done every 20 years using heavy equipment. Approximately 65 additional hours of labor annually would be required. This would also result in an additional expense of approximately $240 to the two permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the two permittees would incur additional costs of $240 and 65 hours of labor time annually.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would be prohibited. As a result, use would decline from 100 RVDs, including two RVDs of vehicle dependent visits, to zero. Most of this use would be absorbed on other lands.

Conclusion — Recreational ORV use would decline from 100 RVDs to zero.

WOODHAWK — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action, the entire 8,100 acres would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

Woodhawk WSA appears natural. The developments are scattered throughout the WSA and are well screened by rugged terrain.

Based on the oil and gas development scenario, four gas wells would be drilled in the 4,623 acres outside of the UMWSR corridor along the western boundary of the WSA. One of the wells would be successful and the other three would be dry holes. The impact on naturalness would be due to the well head and the vegetative contrast on the 5.2 acres of reclaimed well pads and 1 mile of underground pipeline. At each well head there would be a 3 foot high pipe and valves (Christmas tree) that would be visible from 1/2 mile along the ridgetops. These developments would reduce naturalness on 20 percent of the WSA in the southwest corner and in the vicinity of Deweese Ridge Road.

The existing range improvements include 12 reservoirs and 3.5 miles of three fences. The reservoirs are generally screened by topography. They are substantially unnoticeable. Checking livestock and inspecting range projects would continue weekly. Recreational ORV use occurs on the entire 1.75 miles of vehicle ways. The 1 miles of gas well road to the one successful well would not increase the 400 RVDs of use. However, it would disperse the use more evenly along the western edge of the WSA. This passage of motorized vehicles along 1.75 miles of vehicle ways and 1 mile of gas well road would maintain their nonvegetated condition. These line forms would reduce naturalness that would be apparent from approximately 10 percent of the western portion of the WSA.

Solitude or Primitive and Unconfined Recreation

Woodhawk WSA has outstanding opportunities for solitude in the eastern portion due to extensive topographic screening.

During the 2-month period that each well is being drilled, there would be drill rigs and associated equipment which would be very apparent from the ridges and broad benches of the western half of the WSA. Activity associated with developing four gas wells would have a significant impact on solitude in the western portion of the unit. This would impact solitude over the western 25 percent of the WSA during the 2 months that each well was being drilled.

Use of motorized vehicles to manage livestock would continue to occur weekly. Maintenance of fences using motorized vehicles occur annually and maintenance of the 12 reservoirs occurs less frequently.

Recreational ORV use of 400 RVDs annually would continue. Most of this use is during fall mule deer hunting season and averages less than 10 percent of the year. These uses detract from feelings of solitude along the 1.75 miles of vehicles ways, the cherry-stemmed road and 1 mile of gas well road. The feelings of solitude are reduced on 15 percent in the southwest corner of the WSA.

The WSA does not have outstanding opportunities for recreation. Gas well development and ORV use would diminish primitive recreation opportunities in the westernmost quarter of the WSA.

Supplemental Values

No actions would affect the scenic and historic values of the WSA.

Conclusion — The naturalness of the southwest portion of the WSA, comprising 20 percent of it, would be reduced by gas development. Opportunities for solitude and primitive and unconfined recreation would be reduced on approximately 25 percent of the WSA.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, four gas wells would be drilled in the 4,623 acres outside of the UMWSR, but within the WSA.

Conclusion — There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 30 to 150.

During each of the 2 month periods that four gas wells are developed, mule deer would be displaced out of the north central portion of the WSA.

Current levels of livestock management and existing range improvement would continue.

Recreational ORV use, particularly that which is associated with mule deer hunting, would continue unchanged.

As a result, the mule deer population is expected to continue at a level of between 30 and 150.

Conclusion — Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect three fences and 12 reservoirs. Maintenance of the reservoir using heavy equipment would continue.

Conclusion — There would be no impact on livestock checking or range livestock maintenance levels.

IMPACTS ON RECREATIONAL ORV USE

Recreational ORV use would continue at approximately 400 RVDs annually.

Conclusion — There would be no impact on levels of recreational ORV use.

WOODHAWK — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 8,100 acres of the Woodhawk WSA would be recommended as suitable. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Woodhawk WSA appears natural. The developments are scattered throughout the WSA and are well screened by rugged terrain.

Motorized equipment would be used annually for hauling fencing supplies annually and every 20 years to maintain 12 reservoirs. Checking livestock and inspecting fence would be done on foot or horseback. The passage of motorized vehicles would no longer maintain vehicle ways. As a result, 1.75 miles of vehicle ways would revegetate to an apparently natural condition. This would increase naturalness on 10 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Woodhawk WSA has outstanding opportunities for solitude due to extensive topographic screening. Motorized equipment would only be used to haul, for example, fencing supplies and salt. Heavy equipment would be used every 20 years to maintain the 12 reservoirs. The decreases in motor vehicle use would enhance solitude on 15 percent of the WSA in the southwest corner.

The opportunities for primitive recreation would improve in the westernmost 50 percent of the WSA due to the elimination or ORV use along existing vehicle ways. Opportunities for primitive recreation in the remainder of the WSA would remain unchanged.

Supplemental Values

No actions would occur which affect the scenic and historic values of the WSA.

Conclusion — The naturalness of the Woodhawk WSA would increase on 10 percent due to the revegetation of 1.75 miles of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on 15 percent of the WSA.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, four gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — The opportunity to drill four gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 30 to 150.

The closures of 1.75 miles of vehicle ways would reduce hunting pressure for mule deer in the western portion of the WSA. Since the cherry-stemmed road still provides access to the western portion of the WSA, this reduction would only occur in the roughest country along the southern third of the unit. The range of mule deer population levels is expected to increase to 35 to 165 mule deer.

Conclusion — Mule deer population levels would increase from a range of 30 to 150 to a range of 35 to 165.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock and inspection of the 12 reservoirs and 3.5 miles of fence would be done on foot or horseback using hand tools. Maintenance of the 12 reservoirs would be done every 20 years using heavy equipment. Apprxomately 20 additional hours of labor annually would be required. This would also result in an additional expense of approximately $85 to the two permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt. One permittee would incur approximately 90 percent of this impact.

Conclusion — The checking of livestock and range development maintenance could continue, but the two permittees would incur additional costs of $85 annually and 20 hours of labor time.

IMPACTS ON RECREATIONAL ORV USE LEVELS

The prohibition of recreational use would result in a decline from 400 RVDs to no RVDS of ORV use. Much of this use would be absorbed on other nearby lands.

Conclusion — Recreational ORV use would decline from 400 to zero.

COW CREEK — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE)

Under the proposed action, 21,590 acres of Cow Creek WSA would be recommended as suitable for wilderness designation. There would be no gas well development or recreational ORV use on these 21,590 acres. The remaining 12,460 acres (in four parcels) would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 21,590 acres recommended as suitable appears natural. The 11 water sources, 11.75 miles of vehicle ways and 13 miles of fence are generally scattered throughout and topographically or vegetatively screened within this portion.

Checking of livestock and inspecting fence would be done on foot or horseback. Motorized equipment would be used annually for, if necessary, hauling fencing supplies and every 20 years to maintain 11 water sources. This level of use of motorized equipment would not maintain the nonvegetated appearance of 11.75 miles of vehicle ways. The elimination of the line forms would enhance naturalness on 7 percent of the suitable portion of the WSA in the vicinity of Winter Ridge Road.

The 12,460 acres recommended nonsuitable appears natural. However, in the vicinity of the Coyote Coulee cherry-stemmed road and east of Saskatchewan Butte, naturalness is degraded by clusters of developments.

Based on the oil and gas development scenario, 18 gas wells would be drilled outside of the 660 acres within the UMWSR corridor. Four of the wells would be successful and 14 would be dry holes. The impact on naturalness would be due to the well head and the vegetative contrast on 42 acres of reclaimed pad and underground pipeline. At each well head there would be a 3-foot high pipe and valves (Christmas tree), which would be visible from 1/4 mile along portions of ridges. The 40 miles of road would be very apparent from adjacent ridges.

The existing and proposed range improvements (19 water projects and 4.5 miles of fence) are generally well screened, except in the vicinity of Saskatchewan Butte and the Coyote Coulee cherry-stemmed road.

Use of motorized vehicles to manage livestock would occur along 12.5 miles of vehicle ways and 10 miles of projected gas well road associated with the successful wells. The passage of motorized vehicles would maintain the nonvegetated appearance of vehicle ways.

These imprints of man reduce naturalness on 65 percent of the nonsuitable portions of the WSA.

Solitude or Primitive and Unconfined Recreation

The 21,590 acres recommended as suitable has outstanding opportunities for solitude in the rugged terrain of the major drainages. Motorized equipment would be used every 20 years to maintain 11 water sources and annually for hauling fencing supplies. Checking livestock would be done on foot or horseback. Motorized vehicle use along the 3.5 miles of the Winter Ridge cherry-stemmed road would continue to degrade solitude in the immediate vicinity. However, the elimination of recreational ORV use on vehicle ways would enhance opportunities for solitude over 10 percent of the 21,590 acres.

The suitable portion does not have outstanding opportunities for primitive and unconfined recreation. Motorized vehicle use, both onsite for project maintenance and offsite, would continue to diminish primitive recreation opportunities.

The nonsuitable portions of 12,460 acres do not contain any outstanding opportunities for solitude. They are not well screened topographically or vegetatively. They are either less than 1/2 mile wide or contain cherry-stemmed roads. As such, the impacts of offsite activities degrade feelings of solitude to the extent that they are not outstanding. The activity associated with developing 18 gas wells would reduce solitude on 70 percent of the three nonsuitable portions outside of the UMWSR corridor. Motorized vehicle use to manage livestock would continue along 12.5 miles of vehicle ways.

Recreational ORV use of 200 RVDs would continue and occur along the 12.5 miles of vehicle ways and 10 miles of projected gas well roads associated with the successful wells. Most of this use is during hunting season. It detracts from feelings of solitude in primarily the three easternmost nonsuitable portions.

The nonsuitable portions do not have outstanding opportunities for primitive or unconfined recreation although good hunting opportunities exist. The noise associated with gas well development would degrade these opportunities.

Supplemental Values

The suitable portion has good scenic values. The nonsuitable portion has remnants of the homesteading era.

Conclusion — The naturalness would be enhanced on 7 percent of the suitable portion by the revegetation of vehicle ways. The outstanding opportunities for solitude would be enhanced on 10 percent of the suitable portion by the elimination of recreational ORV use and the reduction of the use of mechanized equipment for range development maintenance.

Naturalness would be reduced on 65 percent of the nonsuitable portions outside of the UMWSR corridor due to gas facilities. The opportunities for solitude or primitive and unconfined recreation, neither of which is outstanding, would be further reduced for these portions.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Based on the oil and gas development scenario, 32 gas wells are projected to be drilled in the portion of the WSA recommended as suitable for wilderness designation. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Gas wells would be drilled within the portion of WSA recommended as nonsuitable for wilderness designation, but outside of the UMWSR corridor.

Conclusion — The opportunity to drill 32 gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population level ranges from 86 to 336 in the portion of the WSA recommended as suitable for wilderness designation. The closure of 11.25 miles of vehicle ways would decrease hunting pressure. The effect of the decrease in hunting pressure is that mule deer population levels would increase to a range of 96 to 386.

The population ranges from 49 to 194 in the portions of the WSA recommended as nonsuitable for wilderness designation. The networks of vehicle ways and cherry-stemmed roads in these portions is sufficient to provide consistent hunting pressure over the entire acreage. Therefore, the additional road access provided by gas well roads will not increase hunting pressure. As a result, the mule deer population levels will remain at a range of between 49 to 194.

Conclusion — Mule deer population levels will increase to a level of between 145 and 580.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

For the portion of the WSA recommended as suitable for wilderness designation, checking livestock and inspection of the 11 reservoirs and 13 miles of fences would be done on foot or horseback using hand tools. Maintenance of the 11 reservoirs would be done every 20 years using heavy equipment. Approximately 150 additional hours of labor annually would be required. This would also result in an additional expense of approximately $564 to the three permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

For the portion of the WSA recommended as suitable for wilderness designation, motorized vehicles would continue to be used to check livestock and inspect 4.5 miles of fences and 16 reservoirs. Maintenance of the 16 reservoirs using heavy equipment would continue.

Conclusion — The checking of livestock and range development maintenance could continue, but the three permittees would incur additional cost of $564 annually and 150 hours of labor time. There would be no impact on livestock management, or the maintenance of range projects in the 12,460 acres recommended as nonsuitable for wilderness designation.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENT PROJECTS

Construction of three reservoirs is projected in the 12,460 acres that is recommended as nonsuitable for wilderness designation. These would be built using heavy equipment.

Conclusion — There would be no impact on construction of new range improvement projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use on the portion of the WSA recommended as suitable would decline from 250 to zero. Recreational ORV use on the portion of the WSA recommended as nonsuitable would continue at 200 RVOs, including 10 RVOs.

Conclusion — Recreational ORV use levels would decline from 450 RVOs, including 15 vehicle dependent

RVDs to 200 RVDs, including 10 vehicle dependent RVDs.

COW CREEK — NO WILDERNESS/NO ACTION ALTERNATIVE

Under the proposed action, the entire 34,050 acres of Cow Creek WSA would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

Cow Creek WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain or vegetation.

Fifty gas wells would be drilled in the 32,032 acres of the WSA outside of the UMWSR corridor within the WSA. Ten of the wells would be successful and 40 would be dry holes. The impact on naturalness would be due to the well head and the vegetative contrast on 110 acres of 50 reclaimed well pads and 50 miles of underground pipeline. At each well head there would be a 3-foot high pipe and valves (Christmas tree), which would be visible from 1/4 mile along portions of ridges. The 110 miles of road would be very apparent from the adjacent ridges. They would be apparent from approximately 25 percent of the WSA.

The existing projected range improvements (30 water projects and 17.5 miles of fences) are generally screened by vegetation or rugged topography. They are apparent only in their immediate vicinity.

Use of motorized vehicles to manage livestock would occur along 24.25 miles of vehicle ways and 20 miles of gas well road associated with the 10 successful wells. Recreational ORV use occurs on the existing 24.25 miles of vehicles ways in the WSA. The additional road associated with gas development would not increase the 450 RVD's level of recreational ORV use. The passage of motorized vehicles would maintain the nonvegetated condition of vehicle ways, which would reduce the naturalness in the vicinity of Squaw Creek Road, Winter Ridge Road, and the southeast boundary. This would affect approximately 30 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the central portions of the WSA along the major drainages. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use.

During the 2-month period that each well is being driller, there would be a drill rig and associated equipment which would be very apparent from the WSA. The activity associated with developing 50 gas wells would reduce the solitude on 30 percent of the WSA. This impact would occur during the 2 months that each well was being drilled. The portion of the WSA most affected would be the northwest peninsula.

Motorized vehicle use to manage livestock would continue to occur once weekly. This would impact solitude most along the northern and eastern boundaries. Maintenance of fences using motorized vehicles occur annually and reservoir maintenance occurs less frequently. The use of cherry-stemmed roads also diminishes solitude in the eastern portion of the WSA.

Recreational ORV use of 450 RVDs annually would continue. Most of this use is during fall mule deer hunting season. This detracts from the feeling of solitude along the 24.25 miles of vehicle ways and 20 miles of projected gas well roads. These activities detract from the feeling of solitude along the northern 20 percent and southeastern 15 percent of the WSA approximately 20 percent of the time.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting and, to a lesser extent, camping along the UMWSR by boat users. The noise associated with gas well development and ORV use would diminish the primitive recreation opportunities in the vicinity of the 50 gas wells and along the 24.25 miles of vehicle ways and five cherry-stemmed roads.

Supplemental Values

The area contains remnants from the homesteading era and has good scenic values.

Oil and gas development would degrade scenic values.

Conclusion — Naturalness would be reduced on 25 percent of the WSA due to gas development. Opportunities for solitude and primitive recreation would be reduced on 30 percent of the WSA due to gas well drilling activities.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Fifty gas wells would be drilled in the 32,032 acres outside of the UMWSR, but within the WSA.

Conclusion — There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 135 to 530.

During the periods that 50 gas wells are drilled, mule deer would be displaced within the WSA. However, habitat would still maintain current population levels.

Current levels of livestock management and existing range improvement maintenance would continue.

Recreational ORV use, particularly that which is associated with mule deer hunting, would continue unchanged.

As a result, the mule deer population is expected to continue at a level of between 135 and 530.

Conclusion — Mule deer population levels would not be impacted. Displacement would occur temporarily while gas well development occurred.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect projects. Maintenance of the 30 existing and proposed water projects would continue.

Conclusion — There would be no impact on livestock management or the maintenance of range projects.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENT PROJECTS

Construction of three reservoirs is projected in the 34,050 acres that is recommended as nonsuitable for wilderness designation. These would be built using heavy equipment.

Conclusion — There would be no impact on construction of new range improvement projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would continue at approximately 450 RVDs annually, which includes approximately 15 RVDs of vehicle dependent visits.

Conclusion — There would be no impacts on levels of recreational ORV use.

COW CREEK — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 34,050 acres of the Cow Creek WSA would be recommended as suitable for wilderness designation. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Cow Creek WSA appears natural. The developments are dispersed throughout the WSA and generally screened by rugged terrain.

Checking livestock and inspecting fence would be done on foot or on horseback.

Motorized equipment would be used annually for, if necessary, hauling fencing supplies and every 20 years to maintain 30 existing and projected water sources.

This level of use of motorized equipment for the maintenance of range facilities would not maintain the non-vegetated appearance of vehicle ways. As a result, the 24.25 miles of vehicle ways would revegetate. The elimination of the line forms would enhance naturalness apparent on 25 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the central portion of the WSA due to topographic screening along the major drainages. Opportunities for solitude exist in the remainder of the WSA, but are not outstanding due to offsite developments and use.

Motorized equipment would be used every 20 years to maintain 30 existing and projected water sources annually for hauling fence supplies. Checking livestock and inspecting fence would be done on foot or horseback.

These activities detract from feelings of solitude along the northern 20 percent and southeastern 10 percent of the WSA approximately 1 percent of the time. The use of five cherry-stemmed roads also diminishes solitude in the WSA.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. Primitive recreational opportunities include mule deer hunting and, to a lesser extent, camping along UMWSR by boat users.

The noise of motorized vehicles used to maintain water sources and haul fence supplies would diminish primitive recreation opportunities. This would occur on an annual basis (approximately 1 percent of the time). This is scattered over the WSA, but most concentrated in the northern and eastern portions.

Supplemental Values

The area contains remnants from the homesteading era and has good scenic values.

No actions would impact these values.

Conclusion — Naturalness would be enhanced on 30 percent of the WSA by the revegetation of vehicle ways. Opportunities for solitude or primitive and unconfined recreation would be enhanced by the elimination of recreational ORV use and reduction of mechanized equipment for range development maintenance.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Fifty gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — The opportunity to drill 50 gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 135 to 530.

The closures of 24.25 miles of vehicle ways would reduce hunting pressure for mule deer in the central core of the WSA. Hunting pressure along the western and southeastern boundary would continue due to vehicle access around the outside of the periphery. The net effect of the reduction in hunting pressure is that mule deer population levels are expected to increase to 145 to 580.

Conclusion — Mule deer population levels would increase from a range of 135 to 530 to a range of between 145 to 580.

IMPACTS ON LIVESTOCK CHECKING AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock, inspection of 30 existing and proposed water sources and 17.5 miles of fence would be done on foot or horseback using hand tools. Maintenance of the 30 water sources would be done every 20 years using heavy equipment. Approximately 310 additional hours of labor annually would be required. This would also result in an additional expense of approximately $1,165 to the seven permittees and one grazing association. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the grazing users would incur additional costs of $1,165 and 310 hours of labor time annually.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENT PROJECTS

Construction of three reservoirs is projected in the 34,050 acres that is recommended as suitable for wilderness designation. These would be built using heavy equipment.

Conclusion — There would be no impact on construction of new range projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

The prohibition of recreational use would result in a decline from 450 RVDs to no RVDs of ORV use. Much of this use would be absorbed on nearby lands.

Conclusion — Recreational ORV use levels would decline from 450 RVDs, including 15 vehicle dependent RVDs to zero.

ANTELOPE CREEK — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE 1)

Under the proposed action, the western roadless area of 9,600 acres would be recommended as suitable for wilderness designation. There would be no oil and gas development or recreational ORV use. The eastern roadless area of 2,750 acres would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The western roadless area appears natural. The vehicle ways are generally lightly use and are located on the ridges off of the northern and eastern boundary. There is a small reservoir on the eastern boundary and an electric exclosure fence on the southwest boundary.

Motorized equipment would be used every 20 years to maintain the reservoir. Checking livestock and inspecting the exclosure fence would be done on foot or horseback. The passage of motor vehicles would no longer maintain the nonvegetated appearance of 9.75 miles of vehicle ways. As a result, they would revegetate and enhance the naturalness of 20 percent of the area.

The eastern roadless area appears natural. The existing range development is a water well on the northern boundary of the area. Motorized equipment would be used every 20 years to maintain the water well.

A total of four gas wells would be drilled along the eastern and western boundaries. One of the wells would be successful and three would be dry holes. This would be apparent from 40 percent of the area. The impact would be due to the well heads and the vegetative contrast on 5.2 acres of reclaimed well pads and 1 mile of underground pipe. At the well head of the successful well there would be a 3-foot high pipe and valves (Christmas tree). The impacts on naturalness would be apparent in their immediate vicinity from the ridges along the east and west boundaries of the WSA.

Checking livestock would be done with motor vehicles and recreational ORV use of 50 RVDs would continue along 1.25 miles of vehicle ways and on 1 mile of gas well road associated with the successful well. This passage of vehicles would maintain the nonvegetated condition of the vehicle way. This line form would diminish naturalness on 10 percent of the eastern roadless area.

Solitude or Primitive and Unconfined Recreation

The southern 90 percent of the western roadless areas, except for a narrow strip along the east boundary, has outstanding opportunities for solitude. This is due to moderate tree cover (25 percent) and the heavily dissected terrain created by tributaries of the Missouri River.

There would be no gas well development and no recreational ORV use. Recreational ORV use would decrease from 250 RVDs, inclusive five vehicle dependent RVDs, to zero and motorized vehicle use associated with livestock checking would cease. As a result, the feelings of solitude in 20 percent of the western roadless area would improve.

The 2,750 acre eastern roadless area only has opportunities for solitude in conjunction with the USFWS Antelope Creek Wilderness Study Area to which it is contiguous. Offsite activities along the north, west and east boundaries degrade solitude around the periphery and constitute 25 percent of the area.

During the 2-month period that each of these wells is being drilled, the drill rig and associated equipment would be apparent from the ridge on both sides of the roadless area. Four gas wells would be drilled in the 2,750 acres. The drilling would occur on the ridges east and west of Antelope Creek which define the drainage. The activity associated with the drilling would degrade solitude along these two ridges. Solitude would still be available below in the bottom of Antelope Creek where moderately dissected terrain would somewhat screen the activities above. the activities would degrade solitude on 70 percent of the area.

Use of motorized vehicles to manage livestock would continue to occur weekly. These activities would continue to degrade solitude, particularly in the northern portion of the area. Maintenance of the water well would have no impact on solitude because the well is along the northern border and such activities are infrequent. Recreational ORV use of 50 RVDs would continue along 1.75 miles of vehicle ways, but also be dispersed along the gas well road. This dispersal of use would degrade solitude over 15 percent of the roadless area. This would occur primarily during the fall hunting season.

The roadless area does not have outstanding opportunities for primitive and unconfined recreation. The activity associated with gas well development would degrade primitive recreation opportunities along the northern portion of the west and east boundaries.

Supplemental Values

No actions would affect the scenic values of either roadless area.

Conclusion — Naturalness of the 9,600 acre western roadless area would increase on 25 percent along the northern boundary due to revegetation of vehicle ways. Opportunities for solitude and primitive recreation would improve on the northern 25 percent. The naturalness of the 2,750 acre eastern roadless area would be reduced due to gas well developments. Opportunities for solitude and primitive recreation would be reduced by gas well activity and development and dispersed ORV use.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

For the western roadless area, eight gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

For the eastern roadless area, four gas wells would be drilled.

Conclusion — Four gas wells would be drilled. The opportunity to drill eight gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population in the western roadless area ranges from 45 to 165. The closure of 9.75 miles of vehicle ways would reduce the hunting pressure for mule deer along the eastern, western and northern boundaries. Since the vehicle ways have provided access to only a strip around the periphery of the area, the reduction in hunting pressure would only be around this strip. As a result of the reduction, mule deer population levels would increase slightly from a range of 45 to 165 to a range of 50 to 180.

The mule deer population level in the eastern roadless area ranges from 5 to 30.

During each of the 2-month periods that gas well development occurs, mule deer would be displaced, but generally remain in the roadless area.

Current levels of livestock management and maintenance of the water well would continue.

Recreational ORV use levels, including that which is associated with mule deer hunting, would continue unchanged. Use is expected to be dispersed over an additional 2 miles of projected gas well roads. However, each of these extend no more than 1/2 mile into the roadless area. They do not provide hunting pressure in addition to that already provided by the existing access to the roadless area from the boundary roads and existing vehicle ways. As a result, mule deer population levels would not change.

Conclusion — The mule deer population level in the WSA would increase from a range of 50 to 195 to a range of 55 to 210.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

For the 9,600 acres in the western roadless area, checking livestock and inspection of range projects would be done on foot or horseback using hand tools. The existing reservoir would be maintained using heavy equipment once every 20 years. The electric exclosure fence would continue to be maintained by the BLM on foot or horseback. Approximately 120 additional hours of labor annually would be required. This would result in an additional expense of approximately $460 to two permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

For the 2,650 acre eastern roadless area recommended as nonsuitable, livestock management such as checking livestock and distributing salt, would continue using motorized vehicles. The water well would continue to be maintained using motorized equipment.

Conclusion — The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $460 annually and 120 hours of labor time.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would be prohibited on the 9,600 acre western roadless area. As a result, annual recreational ORV use levels would drop from 250 RVDs, including five vehicle dependent RVDS, to zero.

Recreational ORV use would continue on the 2,750 acre eastern roadless area. That level of use would be dispersed more along the western and eastern boundaries by projected gas well roads.

Conclusion — The annual ORV use level would drop from 300 to 50 RVDs.

ANTELOPE CREEK — NO WILDERNESS/ NO ACTION ALTERNATIVE

Under the proposed action, the entire 12,350 acres would be recommended as nonsuitable for wilderness designation. This includes the western roadless area of 9,600 acres and the eastern roadless area of 2,750 acres.

IMPACTS ON WILDERNESS VALUES

Naturalness

Antelope Creek WSA appears natural. Most developments are generally located in the northern 10 percent of the WSA or in the eastern end.

Twelve gas wells would be drilled in the 7,977 acres outside of the UMWSR corridor along the northern border, the eastern border and the road between the two roadless areas. Three of the wells would be successful and nine would be dry holes. The impact on naturalness would be due to the well heads and the vegetative contrast on the 15.6 acres of reclaimed well pads and 3 miles of underground pipeline. At each of the well heads associated with the successful wells there would be a 3-foot high pipe and valves (Christmas tree) that would be visible from 1/2 mile along the ridgetops. The vegetative contrast would be apparent from approximately 0.1 mile. The 12 miles of road would reduce naturalness along the benches on the northern edge of the WSA.

The existing range improvements include two water developments and one mile of electric fence. The water developments are well screened by topography. The fence is an exclosure and lies along the southwest boundary of the WSA. They are substantially unnoticeable. Checking livestock and inspecting the two water developments would continue weekly. Recreational ORV use occurs on the entire 11 miles of vehicle ways. The 12 miles of gas well road would not increase the 300 RVDs of use. However, it would disperse the use more evenly along the northern and eastern edges of the WSA. This passage of motorized vehicles along 11 miles of vehicle ways and 12 miles of gas well roads would maintain their nonvegetated condition. These line forms would reduce naturalness that would be apparent for approximately 8 percent of the northern edge of the WSA.

Solitude or Primitive and Unconfined Recreation

Antelope Creek has outstanding opportunities for solitude due to extensive topographic screening and vegetative cover (in the coulees) comprising 25 percent of the WSA. Highway traffic along Highway 19 and other offsite activities reduce feelings of solitude in approximately 25 percent of the eastern roadless area.

During the 2-month period that each well is being drilled, there would be a drill rig and associated equipment which would be apparent from the ridges on the northern 45 percent of the WSA. Activity associated with developing 12 gas wells would have a significant impact on solitude in the northern 45 percent of the WSA. This would impact solitude during the 2 months that each well was being drilled.

Use of motorized vehicles to check livestock would continue to occur weekly. Existing vehicle ways and projected gas well roads would be used. This would impact solitude along a thin strip along the northern boundary of the WSA comprising 20 percent of it. Maintenance of the fence is handled by the BLM without using motorized vehicles. Maintenance of the two water developments occur less frequently. These activities do not detract from feelings of solitude because virtually all activity is along the boarders of the WSA and such activity is topographically well screened.

Recreational ORV use of 300 RVDs annually would continue. Most of this use is during fall mule deer hunting season and averages less than 10 percent of the year. This use detracts from feelings of solitude along the 11 miles of vehicle ways and 3 miles of projected gas well roads associated with the successful wells. The feelings of solitude would be reduced on 25 percent of the WSA.

The WSA does not have outstanding opportunities for primitive and unconfined recreation.

The noise associated with gas well development would diminish primitive recreation opportunities in the northern fourth of the WSA approximately 5 percent of the time. The noise of ORV use would diminish primitive recreation opportunities in the northern 20 percent of the WSA.

Supplemental Values

No actions would affect the scenic values of the WSA.

Conclusion — Naturalness would be reduced by gas developments on the northern 30 percent of the WSA. Opportunities for solitude and primitive and unconfined recreation would be reduced on approximately 45 percent of the WSA.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Twelve gas wells would be drilled in the 4,373 acres outside of the UMWSR, but within the WSA.

Conclusion — Twelve wells would be drilled. There would be no impact on oil and gas development levels.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 50 to 195.

During each of the 2-month periods that 12 gas wells are developed, mule deer would be displaced out of the northern portion of the WSA.

Current levels of livestock management and maintenance of two water developments would continue.

Recreational ORV use levels, including that which is associated with mule deer hunting, would continue unchanged. Use is expected to be dispersed over an additional 12 miles of projected gas well roads. However, each of these extends only approximately 3/4 mile into the roadless area. They are in the same portion of the WSA as the existing vehicle ways. As such, they do not provide hunting pressure in addition to that provided by the existing vehicle ways.

As a result, the mule deer population is expected to continue at a level of between 50 and 195.

Conclusion — Mule deer population would continue at a level of between 50 and 195. Displacement would occur temporarily while gas well development occurred.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect two water developments. The exclosure fence would continue to be maintained by the BLM using nonmotorized equipment. Maintenance of the water developments using heavy equipment would continue.

Conclusion — There would be no impact on livestock checking or range project maintenance levels.

IMPACTS ON RECREATIONAL ORV USE

Recreational ORV use would continue at approximately 300 RVDs, including 10 RVDs of vehicle dependent visits, annually.

Conclusion — There would be no impact on levels of recreational ORV use.

ANTELOPE CREEK — PARTIAL WILDERNESS ALTERNATIVE 2

Under the proposed action, the eastern roadless area of 2,750 acres would be recommended as suitable for wilderness designation. There would be no oil and gas development or recreational ORV use on this 2,750 acres. The western roadless area of 9,600 acres would be recommended as nonsuitable.

IMPACTS ON WILDERNESS VALUES

Naturalness

The eastern roadless area appears natural. The existing range development is a water well on the northern boundary of the area. There would be no oil or gas development or recreational ORV use. Motorized equipment would be used every 20 years to maintain the water well. Checking livestock would be done on foot or horseback. The passage of motor vehicles would no longer maintain the nonvegetated appearance of 1.75 miles of vehicle ways. As a result, it would revegetate and enhance the naturalness on 10 percent of the area.

The western roadless area appears natural. The existing range developments include a reservoir on the east boundary and an electric exclosure fence on the southwest boundary. Motorized equipment would be used every 20 years to maintain the water well.

A total of eight gas wells would be drilled along the northern and eastern boundaries. Two of the wells would be successful and six would be dry holes. The impact would be due to the well heads and the vegetative contrast on 11 acres of reclaimed well pads and 2.5 miles of underground pipe. At each well head there would be a 3-foot high pipe and valves (Christmas tree). The impacts on naturalness would be in the immediate vicinity and apparent from the ridges.

Checking livestock would be done with motorized vehicles and recreational ORV use of 250 RVDs would continue along 9.75 miles of vehicle ways and 2 miles of gas well road associated with the successful wells. This passage of vehicles would maintain the nonvegetated condition of the vehicle ways.

Solitude or Primitive and Unconfined Recreation

The 2,750 acre eastern roadless area only has opportunities for solitude in conjunction with the USFWS Antelope Creek Wilderness Study Area to which it is contiguous. Offsite activities along the north, west and east boundaries degrade solitude on 25 percent of the area, generally around the north, west and east periphery.

Recreational DRV use would decrease from 50 RVDs, including five vehicle dependent RVDs, to zero and motorized vehicle use associated with livestock checking would cease. As a result, the feelings of solitude in 10 percent of the area would improve. However, they would still not be outstanding due to the continued presence of offsite activities and their impact on solitude.

The 9,600 acre westward roadless area has outstanding opportunities for solitude. These opportunities are on the southern 80 percent except for a narrow strip along the east boundary. This is due to the moderate tree cover (25%) and the heavily dissected terrain created by tributaries of the Missouri River.

During the 2-month period that each well is drilled, the drill rig and associated equipment would be apparent from the benches along the north and east boundaries of the area. Eight gas wells would be drilled along the northern and eastern boundaries. During the 2-month period that each of these wells is being drilled, there would be a drill rig and associated equipment which would degrade feelings of solitude along the ridges on the northern 40 percent of the WSA.

Use of motorized vehicles to check livestock would continue to occur weekly using motorized vehicles. Eight miles of gas well road and 9.75 miles of vehicle ways would be used. This would impact solitude on the WSA along the northern and eastern boundaries. Maintenance of the reservoir would occur every 20 years using heavy equipment. The electric exclosure fence would continue to be maintained by the BLM on foot or horseback. Maintenance of the reservoir would occur every 20 years. These maintenance activities do not impair opportunities for solitude because the activities are on the boundaries of the area and are infrequent. Recreational DRV use would continue at 250 RVDs, including five RVDs of vehicle dependent use. Most of this is during the fall mule deer hunting season and averages less than 10 percent of the year. This use detracts from feelings of solitude along the 9.75 miles of vehicle ways and 8 miles of projected gas well roads associated with the successful wells. The feelings of solitude would be reduced on 25 percent of the roadless area.

The roadless area does not have outstanding opportunities for primitive and unconfined recreation. Mule deer hunting is good and river based camping occurs along the Missouri River. Oil and gas activities would diminish the opportunity for primitive recreation.

Supplemental Values

No actions would affect the scenic values of the WSA.

Conclusion — For the 2,750 acre eastern roadless area, naturalness would be enhanced on 10 percent and solitude would be enhanced on 15 percent of it due to the elimination of recreational ORV use.

For the 9,600 acre western roadless area, naturalness would be reduced on 25 percent of it due to gas facilities. Solitude would be reduced by gas drilling activities on 40 percent of the western roadless area.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Four gas wells are projected to be drilled in the eastern roadless area. They would not be drilled, so as to maintain the wilderness values of the WSA.

Eight gas wells would be drilled in the 5,227 acres of the western roadless area which are outside of the UMWSR corridor.

Conclusion — Eight gas wells would be drilled. The opportunity to drill four gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species in the eastern roadless area is mule deer. The population level ranges from 5 to 30. The closure of 1.25 miles of vehicle ways and elimination of associated ORV use would not reduce hunting pressure in the area. The area is small and easily accessible from the western and eastern boundaries. Therefore, the population level is expected to continue at a level that ranges from 5 to 30.

The dominant big game species in the western roadless area is mule deer. The population level ranges from 45 to 165.

During each of the 2 months that each of eight gas wells are drilled, mule deer would be displaced but generally remain in the roadless area.

Current levels of livestock management and maintenance of the reservoir and exclosure would continue.

Recreational use levels, including that which is associated with mule deer hunting, would continue unchanged. use is expected to be dispersed over the additional projected gas well roads. However, each of these extend no more than 3/4 mile into the roadless area. They provide no significant increases in hunting access to that provided by existing vehicle ways. Therefore, hunting pressure is not expected to increase an the range mule deer population levels would not change.

Conclusion — Mule deer population levels would continue to range from between 50 to 195.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

For the 2,750 acres in the eastern roadless area, checking livestock and inspection of range projects would be done on foot or horseback using hand tools. The water well would be maintained using heavy equipment once every 20 years. Approximately 20 additional hours of labor annually would be required. This would result in an additional expense of approximately $130 to the permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

For the 9,600 acre western roadless area recommended as nonsuitable, livestock management such as checking livestock and distributing salt, would continue using motorized vehicles. The reservoir would continue to be maintained using motorized equipment. The electric exclosure fence would continue to be maintained by the BLM with access by foot or on horseback.

Conclusion — The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $130 annually and 20 hours of labor time.

IMPACTS ON RECREATIONAL ORV USE LEVELS

For the eastern roadless area, ORV use would be prohibited. Levels of use would decline from 50, including five vehicle dependent RVDs, to zero. For the western roadless area, ORV use of 250 RVDs, including five RVDs of vehicle dependent use, would remain the same.

Conclusion — Levels of ORV use would decline from 300 RVDs, of which 10 are vehicle dependent use to 250 RVDs, of which five are vehicle dependent use.

ANTELOPE CREEK — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 12,350 acres of the Antelope Creek WSA would be recommended as suitable. There would be no gas well development or recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Antelope WSA appears natural. The developments are generally located in the northern 10 percent of the WSA or in the eastern end. Motorized equipment would be used every 20 years to maintain two water developments. Checking livestock and inspecting the exclosure fence would be done on foot or horseback. The passage of motorized vehicles would no longer maintain vehicle ways. As a result, 11 miles of vehicle ways would revegetate to an apparently natural condition. Naturalness would be enhanced on 20 percent of the WSA due to the revegetation of vehicle ways.

Solitude or Primitive and Unconfined Recreation

Antelope WSA has outstanding opportunities for solitude in the southern 80 percent of the WSA due to extensive topographic screening and 25 percent tree cover.

Motorized equipment would be used annually to haul, for example, salt. Heavy equipment would be used every 20 years to maintain the two water developments. This level of vehicle use would have an insignificant impact on feelings of solitude. Offsite activities would continue to degrade feelings of solitude along the northern 10 percent and in 25 percent of the eastern roadless area. Overall, solitude would be enhanced over 20 percent of the WSA due to the elimination of ORV use and the reduction in the use of mechanized equipment.

The opportunities for primitive recreation would improve in the northern and eastern portions of the WSA due to the elimination of ORV use along existing vehicle ways. Opportunities for primitive recreation in the remainder of the WSA would remain unchanged.

Supplemental Values

No actions would occur which affect the scenic and historic values of the WSA.

Conclusion — Naturalness of the Antelope Creek WSA would increase on 20 percent of the WSA due to the revegetation of vehicle ways. Opportunities for solitude and primitive and unconfined recreation would improve on the northern 20 percent of the WSA.

IMPACTS ON OIL AND GAS DEVELOPMENT LEVELS

Twelve gas wells are projected to be drilled outside of the UMWSR corridor, but within the WSA. The wells would not be drilled, so as to maintain the wilderness values of the WSA.

Conclusion — No gas wells would be drilled. The opportunity to drill 12 gas wells would be foregone.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 50 to 195.

The closures on 11 miles of vehicle ways would reduce hunting pressure for mule deer along the eastern, western and northern boundaries. However since they provided access to only a thin strip along the northern border, this reduction in pressure would only occur near the southern extremity of two vehicle ways. The range of mule deer population levels is expected to increase from 50 to 195 to a range of 55 to 210.

Conclusion — Mule deer population levels would increase to a range of 55 to 210.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock and inspection of the two water developments and exclosure fence would be done on foot or horseback using hand tools. Maintenance of the two water developments would be done every 20 years using heavy equipment. The exclosure fence is along the southwest boundary of the Antelope Creek WSA. It is maintained by the BLM using monmotorized means. Approximately 140 additional hours of labor annually would be required. This would also result in an additional expense of approximately $530 to two permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the permittees would incur additional costs of $530 annually and 140 hours of labor time.

IMPACTS ON RECREATIONAL ORV USE LEVELS

The prohibition of recreational use would result in no RVDs or ORV use. Recreational ORV use levels would decline from 300 RVDs, including 10 RVDs of vehicle dependent use, to zero. Much of this use would be absorbed on other nearby lands.

Conclusion — ORV use levels would decline from 300 to zero RVDs annually.

BRIDGE COULEE — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action, the entire 5,900 acres of Bridge Coulee WSA would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The existing projects are four reservoirs and two fences. They are well screened by topography and vegetation. They are apparent only in their immediate vicinity. They are spread along the eastern edge of the WSA.

Use of motorized vehicles to manage livestock would occur along 3 miles of vehicle ways on a weekly basis. Recreational ORV use occurs on the 3 miles of vehicle ways. This passage of motorized equipment would maintain their nonvegetated appearance which would reduce the naturalness in the northeast and southeast portions of the WSA.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the WSA, particularly in the center of the WSA. The factors which provide these opportunities are the extensive topographic and vegetative screening, which are most prevalent in the south. Offsite ranch activity and county road use to the west degradate opportunities for solitude in the western portion of the WSA. These values would be retained.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. The only primitive recreation opportunities occurring are mule deer hunting. The opportunities for primitive recreation would remain unchanged.

Supplemental Values

The WSA has scenic breaks created by the deeply etched tributaries of the Musselshell River. The are has minor paleontological resources. Neither of these values would be impacted under the proposed action alternative.

Conclusion — The naturalness and outstanding opportunities of the WSA would be retained.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population ranges from 40 to 50. Current levels of livestock management and recreational ORV use, most of which is associated with mule deer hunting, would continue. Habitat and hunting pressure would continue. As a result, the population of mule deer is expected to remain at their current levels.

Conclusion — Mule deer population levels will not be impacted.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect two fences and four reservoirs. Maintenance of the four reservoirs using heavy equipment would continue.

Conclusion — There would be no impact on livestock management or the maintenance of existing range projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would continue at approximately 100 RVDs annually.

Conclusion — There would be no impact on recreational ORV use levels.

BRIDGE COULEE — ALL WILDERNESS

Under this alternative, the entire 5,900 acres of the Bridge Coulee WSA would be recommended as suitable for wilderness designation. There would be no recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

The WSA is apparently natural. The existing projects are four reservoirs and two fences. They are well screened by topography and vegetation. They are apparent only in their immediate vicinity. They are spread along the eastern edge of the WSA.

Checking livestock and inspecting 4.75 miles of fence would be done on foot or horseback. Motorized equipment would be used annually to haul, for example, fencing supplies, and every 20 years to maintain four reservoirs. Recreational ORV use would be prohibited. As a result of the reduction in motor vehicle use, the 3 miles of vehicle ways would slowly revegetate. The elimination of these line forms would enhance naturalness.

Solitude or Primitive and Unconfined Recreation

Outstanding opportunities for solitude exist in the easternmost half of the WSA, particularly in the center of the WSA. The factors which provide these opportunities are the extensive topographic and vegetative screening which are most prevalent in the south. Offsite ranch activity and county road use to the west degrade opportunities for solitude in the western portion of the WSA.

The elimination of 100 visitor days of recreational ORV use and weekly motorized vehicle use for checking livestock would enhance feelings of solitude.

The WSA does not have outstanding opportunities for primitive recreation. The only primitive recreation opportunities that occur are for mule deer hunting. The reduction in use of motorized vehicles would enhance slightly the quality of primitive recreation.

Supplemental Values

The WSA has scenic breaks created by deeply etched tributaries of the Musselshell River. The area has minor paleontological resources. Neither of these values would be changed under this alternative.

Conclusion — The naturalness, outstanding opportunities for solitude, and the opportunities for primitive recreation of the WSA would be enhanced.

IMPACTS ON BIG GAME POPULATIONS — MULE DEER

The dominant big game species is mule deer. The population ranges from 40 to 50. The closure of 3 miles of vehicle ways would reduce hunting pressure for mule deer in the southern portion of the WSA. Hunting pressure would continue around the periphery of the WSA from roads which encircle the WSA. The net effect of the reduction in hunting pressure is that mule deer population would increase to 44 to 55.

Conclusion — The mule deer population level would increase from a range of 40 to 50 to a level of 44 to 55.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock, inspection and maintenance of two fences and inspection of four reservoirs would be done on foot or horseback using hand tools. Maintenance of the four reservoirs would be done every 20 years using heavy equipment. This would require 40 additional hours of labor and $145 expenditure annually for the two permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — Two permittees would incur additional costs of $145 and 40 hours of labor time annually.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would be prohibited. As a result, use would decline from 100 RVDs to zero.

Conclusion — Recreational ORV use would decline from 100 RVDs to zero.

MUSSELSHELL BREAKS — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action, the entire 8,650 acres of Musselshell Breaks would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The Musselshell WSA is apparently natural, although range projects are scattered throughout the WSA. In addition, construction of an underground stockwater pipeline and two water savers are proposed. Water savers are large rubber bags which lay on the surface of the ground. They would be installed in coulees and so be unobtrusive. The stockwater pipeline would originate from a proposed well out of and northeast of the WSA. Temporary surface disturbance would be a trench (2 miles long and 1 foot wide), which would revegetate naturally within 2 years. Several stockwater tanks would be visible from 0.2 mile.

Vehicles are used along 7.5 miles of vehicle ways to check livestock and inspect and maintain the existing and proposed projects. Recreational ORV use levels of 150 RVDs also occur on these same vehicle ways. This passage of motorized vehicles maintains the nonvegetated appearance of the vehicle ways. The construction of the proposed range projects would slightly degrade the naturalness in the northern third of the WSA.

Solitude or Primitive and Unconfined Recreation

The WSA has outstanding opportunities for solitude in the south central portion due to screening from topographic dissection and lightly forested areas. Offsite impacts associated with use in the Musselshell River bottom degrade opportunities for solitude in a 1/2 mile strip along the western boundary. Use of the vehicle ways occurs weekly and recreational ORV use occurs primarily during mule deer hunting season. These activities detract from the feelings of solitude over approximately 25 percent of the WSA.

The WSA does not have outstanding opportunities for primitive and unconfined recreation, although the WSA provides good hunting opportunities.

Supplemental Values

The WSA has modest scenic values associated with the tributary coulees of the Musselshell River. No proposed actions would affect these values.

Conclusion — The naturalness of the northern third of the WSA would be insignificantly reduced by new project construction. Other wilderness values would remain unchanged.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer, which have a population level that ranges from 35 to 65. No proposed actions would have an impact on the population levels. However, the proposed water projects might serve to congregate individual animals during mid summer. Plentiful water supply is provided by the Musselshell River immediately adjacent to the west boundary of the WSA.

Conclusion — There would be no impact on mule deer population levels.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect two reservoirs, six fences, and three proposed water projects.

Conclusion — There would be no impact on livestock management or the maintenance of existing range projects.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

Two miles of new underground water pipeline and two water catchments would be built using mechanized equipment. No other projects are proposed.

Conclusion — There would be no impact on the construction of 2 miles of pipeline and two water catchments.

IMPACT ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would continue at approximately 150 RVDs, including five vehicle dependent RVDs, annually.

Conclusion — There would be no impact on recreational ORV levels.

MUSSELSHELL BREAKS — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 8,650 acres of Musselshell Breaks WSA would be recommended as suitable for wilderness. There would be no recreational ORV use.

IMPACTS ON WILDERNESS CHARACTERISTICS

Naturalness

The Musselshell WSA is apparently natural, although range projects are scattered throughout the WSA. In addition, construction of two water savers and an underground stockwater pipeline are proposed. Water savers are large rubber bags which lay on the surface of the ground. They would be installed in coulees and so be unobtrusive. The stockwater pipeline would originate from a proposed well out of and northeast of the WSA. Temporary surface disturbance would be a trench (2 miles long and 1 foot wide) which would revegetate naturally within 2 years. Several stockwater tanks would be visible from 0.2 miles. The construction of these proposed range projects would slightly degrade the naturalness of the WSA.

Checking livestock and inspecting 5.9 miles of fence, and casual maintenance of the three proposed water sources would be done on foot or horseback. Maintenance of the two reservoirs and two proposed water savers would occur every 20 years using heavy equipment.

Recreational ORV use would be prohibited. As a result of this reduction in motor vehicle use, the 7.5 miles of vehicle ways would slowly revegetate. The elimination of these line forms would enhance the naturalness of the WSA.

Solitude or Primitive and Unconfined Recreation

The WSA has outstanding opportunities for solitude in the south central portion due to screening provided by topographic dissection and lightly forested areas. Offsite impacts associated with use in the Musselshell River bottom degrade opportunities for solitude in a 1/2 mile strip along the western boundary.

Checking livestock and casual range project maintenance would be done on foot or by horseback. Maintenance of the two reservoirs and two proposed water savers would require heavy equipment every 20 years. There would be no recreational ORV use. As a result, the feelings of solitude would improve slightly over 25 percent of the WSA.

The WSA does not have outstanding opportunities for primitive and unconfined recreation. The decline in motorized vehicle use would slightly improve the opportunities for primitive recreation in the southern portion of the WSA.

Supplemental Values

The WSA has modest scenic values associated with the tributary coulees of the Musselshell River. No actions would affect these values.

Conclusion — The naturalness of the WSA would be insignificantly reduced in the northern third by new project construction and enhanced throughout by the elimination of vehicle ways. Opportunities for solitude and primitive recreation would be enhanced.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer, which have a population level that ranges from 35 to 65. The closure of 7.5 miles of vehicle ways would reduce hunting pressure for mule deer, particularly along the southern and central portions of the WSA. As a result, the population level is expected to increase to a range of 40 to 70.

Conclusion — Mule deer population levels would increase from a range of 35 to 65 to a range of 40 to 70.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking of livestock and inspection of two reservoirs, two proposed water savers and one pipeline. Maintenance of the water savers and reservoir would occur every 20 years using heavy equipment. Approximately 95 additional hours of labor annually and expenses of $360 would be incurred by the five permittees. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The checking of livestock and range development maintenance could continue, but the five permittees would incur additional costs of $360 and 95 hours of labor time annually.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

Two miles of new underground water pipeline and two water catchments would be built using mechanical equipment. No other projects are proposed.

Conclusion — There would be no impact on the construction of two miles of pipeline and two water catchments.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use would be prohibited. As a result, use would decline from 150 RVDs, including five RVDs of vehicle dependent visits, to zero. Most of this use would be absorbed on other lands.

Conclusion — Recreational ORV use would decline from 150 RVDs to zero.

BILLY CREEK — PROPOSED ACTION (NO WILDERNESS/NO ACTION ALTERNATIVE)

Under the proposed action, the entire 3,450 acres of Billy Creek would be recommended as nonsuitable for wilderness designation. The WSA is composed of four separate roadless areas.

IMPACTS ON WILDERNESS VALUES

Naturalness

Billy Creek is apparently natural, although two reservoirs in the easternmost roadless area are not well screened and degrade naturalness. use of motorized vehicles to manage livestock and 25 RVDs of ORV use occurs on 1.25 miles of vehicle ways (an old fire trail). This passage of motor vehicles maintains its nonvegetated condition. The naturalness of the area would continue unchanged.

Solitude or Primitive and Unconfined Recreation

The western portion of the WSA is heavily dissected and has scattered ponderosa pine. The eastern roadless areas are less heavily dissected and there is less forest cover due to an old burn. However, the WSA is very narrow and the four roadless areas are separated by roads. Vehicle travel along these roads impact solitude in much of the WSA. Offsite agricultural activities south of the WSA degrade solitude in the southeast portion of the WSA, which is not in the Billy Creek drainage. As such, none of the four roadless areas nor the WSA as a whole have outstanding opportunities for solitude. However the four roadless areas do have outstanding opportunities for solitude in conjunction with two USFWS wilderness study areas on CMR to the north.

Onsite impacts on solitude are caused by motorized vehicle use for recreational use and checking of livestock along 1.25 miles of vehicle ways. Less often, motorized heavy equipment would be used to maintain five reservoirs.

The outstanding opportunities for solitude in conjunction with the USFWS-CMR to the north would remain unchanged.

Supplemental Values

Supplemental values include scenic breaks in the Billy Creek portion of the WSA and fossil resources. There are no proposed actions which impact these supplemental values.

Conclusion — The wilderness values of the WSA would not be impacted.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population is approximately 25 and these levels would continue.

Conclusion — There would be no impact on the mule deer population.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Motorized vehicles would continue to be used to check livestock and inspect five reservoirs. Maintenance of the fire reservoirs using heavy equipment would continue. There would be no additional labor or expenses.

Conclusion — There would be no impact on livestock management or the maintenance of range projects.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use levels would continue at approximately 25 RVDs annually.

Conclusion — There would be no impact on recreational use levels.

BILLY CREEK — PARTIAL ALTERNATIVE 1

Under this alternative, the westernmost roadless area of 1,650 acres of Billy Creek WSA would be recommended as suitable for wilderness. There would be no recreational ORV use on this 1,650 acres. The three easternmost roadless areas of 1,800 acres would be recommended as nonsuitable.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 1,650 acres appears natural. Two reservoirs in the westernmost portion of the WSA are well screened by topography. There are no vehicle ways and no ORV use. Livestock management is generally by foot or horseback.

The two reservoirs would be maintained with heavy equipment every 20 years. There would be no change on the naturalness of the area.

In the 1,800 acre portion recommended as nonsuitable, there are three reservoirs and 1.25 miles of vehicle ways. The two easternmost reservoirs are not well screened and with the vehicle ways degrade the naturalness of the eastern portion. Heavy equipment would be used to maintain the three reservoirs as needed, approximately every 20 years. There would be no change on the naturalness of the area.

Solitude or Primitive and Unconfined Recreation

The 1,650 acre portion of the WSA is highly dissected and moderately (40%) vegetated with pine. The roadless area is approximately one mile wide and 2 miles long. Vehicle use along the west and east of boundary roads degrade solitude. However, in conjunction with the USFWS East Seven Blackfoot WSA on the CMR to the western roadless area does not have outstanding opportunities for primitive and unconfined recreation, although it does have hunting opportunities.

The three easternmost roadless areas of 1,800 acres recommended as nonsuitable are less heavily dissected. Due to an old forest fire there is only sparse vegetative screening on the eastern two roadless areas.

They have outstanding opportunities for solitude in conjunction with the USFWS Billy Creek WSA on CMR. To the north, the segment does have outstanding opportunities for solitude.

Approximately 365 acres in the southeast are not in the Billy Coulee. The opportunities for solitude on that acreage and an additional 800 acres of ridges within those three segments are impacted by offsite activities to the south.

Each of the three roadless areas had boundary roads. Traffic on these roads degrade feelings of solitude. These roadless areas only have opportunities for solitude in conjunction with the USFWS Billy Creek WSA to the north. Onsite activities which degrade solitude include vehicle us along 1.25 miles of vehicle ways and maintenance, using heavy equipment, of two reservoirs.

The three eastern segments do not have outstanding opportunities for primitive and unconfined recreation, although mule deer hunting is good.

Supplemental Values

Supplemental values include scenic breaks in the Billy Creek portion of the WSA and fossil resources. There are no actions which would impact these values.

Conclusion — The wilderness values of the westernmost roadless area recommended as suitable would be retained. The wilderness values of the eastern three roadless areas would be retained.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species in the WSA is mule deer. The population level of the western roadless area is approximately 15 and it is 10 for the eastern three roadless areas. Currently, hunting in these four roadless areas is on foot from the 3.5 miles of roads between them and on the 1.25 miles of vehicle ways in the eastern two roadless areas. This level of hunting pressure will continue. Therefore, the population level of mule deer is expected to remain unchanged.

Conclusion — Mule deer population levels would not be impacted.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE ACTIONS

For the western roadless area recommended as suitable, livestock checking would continue to be done without motorized vehicles. Maintenance of three reservoirs would be every 20 years using heavy equipment.

For the eastern three roadless areas, livestock checking would occur along 1.25 miles of vehicle ways. Maintenance of the two reservoirs using heavy equipment would continue.

Conclusion — There would be no impact on livestock management and existing range project maintenance levels.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use levels of 25 RVDs occur on the 1.25 miles of vehicle ways in two of the three eastern roadless areas recommended as nonsuitable. This would continue.

Conclusion — There would be no impact on recreational use levels.

BILLY CREEK — PARTIAL ALTERNATIVE 2

Under this alternative, the westernmost roadless areas that is contiguous to the USFWS-CMR Billy Creek Wilderness Study Area would be recommended as suitable for wilderness designation. It is approximately 550 acres. There would be no recreational ORV use. The remaining three roadless areas of 2,900 acres would be recommended as nonsuitable for wilderness.

IMPACTS ON WILDERNESS VALUES

Naturalness

In the 550 acre roadless area recommended as suitable there are no developments or vehicle ways. The area is apparently natural. The area would continue to remain pristine.

In the remaining 2,900 acres recommended as nonsuitable there are five reservoirs and 1.25 miles of vehicle ways. The two easternmost reservoirs are not well screened and degrade naturalness. The 2,900 acres is apparently natural. The fire reservoirs would continue to be maintained using heavy equipment every 20 years. Livestock checking would generally be done on foot or horseback, with the exception of motorized vehicle use on the 1.25 miles of vehicle ways. Recreational ORV use also occurs on the vehicle way. This passage of motorized vehicle maintains the nonvegetated appearance of the vehicle way. This level of naturalness would continue.

Solitude or Primitive and Unconfined Recreation

The 550 acres only has outstanding opportunities for solitude in conjunction with the USFWS Billy Creek WSA on CMR to the north. The area is heavily dissected and has relatively heavy (40%) forest cover. However, activities on the west and east road do degrade opportunities for solitude in 30% of the roadless along the west and east boundaries. There is no motorized vehicle use in the area and this is expected to continue. The opportunities for solitude would remain unchanged.

The area does not have outstanding solitude and unconfined opportunities for primitive recreation, although the area provides good mule deer hunting. There are no activities, current or projected, which would change these opportunities.

The three remaining roadless areas recommended nonsuitable also only have outstanding opportunities for solitude in conjunction with the USFWS wilderness study areas on CMR to the north.

Motorized vehicular use associated with maintenance of five reservoirs and along 1.25 miles of vehicle ways degrade solitude moderately. However, motor vehicle use along the west and east boundaries of each roadless area degrade feelings of solitude along these west and east boundaries.

Since motorized vehicle use and offsite impacts would remain unchanged, there are no changes in the opportunity for solitude.

The three roadless areas do not have outstanding opportunities for primitive and unconfined recreation, although mule deer hunting is good. The level of primitive recreation opportunities would remain undeveloped.

Supplemental Values

Supplemental values include scenic breaks in the Billy Creek portion of the WSA and fossil resources. There are no actions which would impact these values on either the suitable or nonsuitable portions.

Conclusion — The wilderness values on the 550 acres recommended as suitable would be maintained. The wilderness values on the 2,900 acres recommended as nonsuitable would be maintained.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species in the WSA is mule deer. The population level in the 550 acre roadless area is approximately five and for the remainder of the area is 25. Currently, hunting in these areas is from the 3.5 miles of boundary roads and the 1.25 miles of vehicle ways, which is in the nonsuitable portion. There would be no changes in these practices and so hunting pressure would remain unchanged. Therefore, the population level of mule deer would remain unchanged.

Conclusion — Mule deer population levels would not be impacted.

IMPACTS ON LIVESTOCK MAINTENANCE AND EXISTING RANGE PROJECT MAINTENANCE

There are no range projects and livestock checking is done using nonmotorized methods in the 550 acres recommended suitable. This is expected to continue. There would be no additional costs or labor requirements on the 2,900 acres recommended suitable. The maintenance of five reservoirs and use of 1.25 miles of vehicle ways would continue using motorized equipment. There would be additional costs or labor requirements.

Conclusion — For both the suitable and nonsuitable portions there would be no impacts.

IMPACTS ON RECREATION ORV USE LEVELS

There is no recreational ORV use on the 550 acres recommended suitable. The 25 RVDs of recreational use cccurring on the 2,900 acres recommended as nonsuitable would continue.

Conclusion — There would be no impacts on recreational use levels.

BILLY CREEK — ALL WILDERNESS ALTERNATIVE

Under the proposed action, the entire 3,450 acres of Billy Creek would be recommended as suitable for wilderness designation. There would be no recreational ORV use.

IMPACTS ON WILDERNESS VALUES

Naturalness

Billy Creek is apparently natural, although two reservoirs in the easternmost roadless area are not well screened and degrade naturalness. Due to the reduction of ORV use, 1.25 miles of vehicle ways would revegetate. This would eliminate the line form of the vehicle ways and slightly enhance the naturalness of the WSA.

Solitude or Primitive and Unconfined Recreation

The western portion of the WSA is heavily dissected and has scattered ponderosa pine. the two easternmost roadless areas are less heavily dissected and there is less forest cover due to an old burn.

Onsite impacts on solitude are caused by motorized vehicle use for recreational use and checking of livestock along 1.25 miles of vehicle ways would cease. Less often, motorized heavy equipment would be used to maintain five reservoirs. The WSA is very narrow and the four roadless areas are separated by roads. Vehicle travel along these roads impact solitude in much of the WSA. Offsite agricultural activities south of the WSA degrade solitude in the southeast portion of the WSA, which is not in the Billy Creek drainage. As such, none of the four roadless areas nor the WSA as a whole have outstanding opportunities for solitude. However, they have outstanding opportunities in conjunction with two USFWS wilderness study areas on CMR to the north.

The area does not have outstanding opportunities for primitive and unconfined recreation.

The outstanding opportunities for solitude in conjunction with the USFWS-CMR to the north would be slightly enhanced due to the reduction of motorized vehicle use.

Supplemental Values

Supplemental values include scenic breaks in the Billy Creek portion of the WSA and fossil resources. There are no projected actions which impact these values.

Conclusion — The wilderness values of naturalness would be slightly enhanced on the eastern end due to the revegetation of a vehicle way. The outstanding opportunities for solitude of the WSA would be slightly enhanced by the reduction of motorized vehicle use.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population level in the WSA is approximately 25. Currently, hunting in the WSA is by nonmotorized means from the 3.5 miles of boundary roads and on the 1.25 miles of vehicle ways. Hunting from the 1.25 miles of vehicle ways using motorized means would cease. Due to the small size of each roadless area and the ample remaining access from the boundary roads, the level of hunting pressure will continue.

Therefore, the population level of mule deer is expected to remain unchanged.

Conclusion — Mule deer population levels would not be impacted.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE ACTIONS

Checking of livestock using motor vehicles along the 1.25 miles of vehicle ways would cease. Maintenance of five reservoirs using heavy equipment would continue. The elimination of the access for livestock management would cause horse use to be substituted for motor vehicle use. This would result in additional costs of $60 and labor requirements of 15 hours annually. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — Permittees would incur additional costs of $60, and 15 hours of labor time annually.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use levels would decline from approximately 25 RVDs annually to zero.

Conclusion — Recreational use levels would decline from 25 RVDs to zero.

SEVEN BLACKFOOT — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE 1)

Under this alternative, the westernmost 1,160 acres of the northwestern roadless area and 4,550 acres of the northeast roadless area totalling 5,710 acres would be recommended as suitable for wilderness designation. There would be no recreational ORV use. The remainder of the WSA comprising 14,540 acres would be recommended as nonsuitable for wilderness.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 5,710 acres contains five reservoirs and 0.25 miles of fence. These developments are well screened by some of the roughest terrain in the WSA. No actions are projected to occur which would reduce or enhance this value.

The remaining 14,540 acres appears natural with developments well screened by rough terrain and numerous stands of pine. The developments include 11.25 miles of vehicle ways, 11 reservoirs, a spring, and 10 miles of fence. While these developments are scattered throughout the WSA, they are generally along the western portion. Three reservoirs would be constructed and a fence would be built along the northern boundary with the USFWS-CMR. These developments would have an insignificant impact on the naturalness of this portion. The 15 water developments would be maintained every 20 years using heavy equipment. The passage of motorized equipment for checking livestock and recreational ORV use would maintain the nonvegetated appearance of the vehicle ways. The naturalness of the area would be retained.

Solitude or Primitive and Unconfined Recreation

The 1,160 acre segment is too small to have outstanding opportunities for solitude, despite the presence of very deep coulees. However, it contains some of the upper drainages of the USFWS West Seven Blackfoot Wilderness Study Area. As such, it is a physiographic extension that enhances and shares the outstanding opportunities for solitude of the USFWS WSA. It also has, in conjunction with the USFWS area, outstanding opportunities for primitive and unconfined recreation, such as hiking and horseback riding.

The 4,550 acre segment recommended as suitable contains the upper drainages of the USFWS East Seven Blackfoot Wilderness Study Area. As such, it is a physiographic extension that enhances and shares the outstanding opportunities for solitude of the USFWS-Wilderness Study Area. It is well screened by terrain and ponderosa pine from agricultural activity on the rim to the east. It also has, in conjunction with the USFWS area, outstanding opportunities for primitive and unconfined recreation, such as horseback riding and hiking.

Eighty percent of the 14,540 acres recommended as nonsuitable have outstanding opportunities for solitude. This solitude is provided by topographic dissection and vegetative screening, which are generally greater in the south end along Seven Blackfoot Creek. Feelings of solitude are somewhat reduced on 5 percent of the WSA by offsite agricultural activities on the rim around the area. Vehicle use would continue at current levels along the roads between the three roadless areas and vehicle ways. This activity would reduce solitude along them. However, the vegetative cover is generally heavy and so opportunities are high even 0.1 mile from these routes. The opportunities for solitude would be retained over the area.

The 14,540 acres recommended as nonsuitable have outstanding opportunities for primitive and unconfined recreation activities, such as hiking and horseback riding. These activities would continue at current levels.

Supplemental Values

Both the suitable and nonsuitable portions possess scenic values and the presence of douglas fir, which is unusual in this locale, and paleontological resources. There are no actions which would impact these values.

Conclusion — The wilderness values of the 5,710 acres recommended as suitable and of the 14,540 acres recommended as nonsuitable would be retained.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species in the 5,710 acres is mule deer, the population level of which ranges from 40 to 125. Any hunting would continue to be on foot or by horseback due to the rough terrain and lack of vehicle ways. Since there is no change in hunting pressure and no actions effecting habitat, the population level would remain unchanged.

Mule deer is the dominant big game species on the 14,540 acre portion. Their population level ranges from 95 to 340. The WSA is not heavily hunted because the rough terrain makes hunting and game retrieval difficult. This level of hunting pressure is projected to continue. Thus, mule deer population levels are expected to remain at between 95 and 340.

Conclusion — There will be no impact on mule deer population levels.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

For the 5,710 acres recommended as suitable, checking of livestock, inspecting range developments, and, for example, distributing salt, would continue to be done on foot or horseback. The five reservoirs would be maintained every 20 years using heavy equipment and motor vehicles could be used annually to, for example, haul fencing supplies. There would be no increased labor time or costs since horses would not have to be substituted for motor vehicles.

For the 14,540 acres recommended as nonsuitable, checking of livestock and other livestock management practices would continue using motor vehicles. There would be no increased costs or labor time incurred by the permittees.

Conclusion — There would be no impacts on livestock management or project maintenance levels.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

There would be no projects constructed in the 5,710 acre portion. For the 14,540 acre portion, three reservoirs would be constructed using heavy equipment. Three miles of fence on the northern boundary with USFWS-CMR would be built using motorized vehicles. No other range projects are proposed.

Conclusion — There would be no impact on the construction of three reservoirs and 3 miles of fence.

IMPACTS ON RECREATIONAL ORV USE LEVELS

There is no ORV use in the 5,710 acres recommended as suitable.

For the 14,540 acres recommended as nonsuitable, recreational ORV use is 200 RVDs, including 10 RVDs of vehicle dependent use, annually. These levels of use are projected to continue.

Conclusion — There would be no impact on ORV use levels.

SEVEN BLACKFOOT — NO WILDERNESS/NO ACTION ALTERNATIVE

Under this alternative, none of the 20,250 acres would be recommended as suitable for designation as wilderness. The WSA is composed of three roadless areas of 3,950 acres, 4,850 acres, and 11,450 acres.

IMPACTS ON WILDERNESS VALUES

Naturalness

The WSA appears natural with developments well screened by rough terrain and numerous stands of pine. The developments include 11.25 miles of vehicle ways, 16 reservoirs, a spring, and 10.25 miles of fence. While these developments are scattered throughout the WSA, they are generally along the western portion. Three reservoirs would be constructed in the WSA and a fence would be built along the northern boundary with the USFWS-CMR. These developments would have an insignificant impact on the naturalness of the WSA. The 19 reservoirs would be maintained every 20 years using heavy equipment. The passage of motorized equipment for checking livestock and recreational ORV use would maintain the nonvegetated appearance of the vehicle ways. The naturalness of the area would be retained.

Solitude or Primitive and Unconfined Recreation

The dissected terrain and heavy vegetative cover provide outstanding opportunities for solitude over approximately 90 percent of the WSA. The dissection and vegetative screening are generally greater in the northern portion of the WSA. The WSA generally lies below a "rim" of benches around the area. Feelings of solitude are somewhat reduced on 5 percent of the WSA by offsite agricultural activities on this rim. Vehicle use would continue at current levels along the roads between the three roadless areas and vehicle ways. This activity would reduce solitude along them. However. the vegetative cover is generally heavy and so opportunities are high even 0.1 mile from these routes. The opportunities for solitude would be retained over the area.

The WSA has outstanding opportunities for primitive and unconfined recreation activities, such as hiking and horseback riding. These activities would continue at current levels.

Supplemental Values

The area has good scenic values and the presence of douglas fir, which is unusual in this locale, and paleontological resources. There are no actions which would impact these values.

Conclusion — The wilderness values of naturalness, outstanding opportunities for solitude on 90 percent of the WSA, primitive recreation and supplemental values would be retained.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

Mule deer is the dominant big game species. Their population level ranges from 135 to 465. The WSA is not heavily hunted because the rough terrain makes hunting and game retrieval difficult. This level of hunting pressure is projected to continue, Thus, mule deer population levels are expected to remain at between 135 and 465.

Conclusion — There will be no impact on mule deer population levels.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

The checking of livestock and other livestock management practices would continue using motor vehicles. There would be no increased costs or labor time incurred by the permittees.

Conclusion — There would be no impacts.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

Three reservoirs would be constructed using heavy equipment. Three miles of fence on the northern boundary with USFWS-CMR would be built using motorized vehicles. No other range projects are proposed.

Conclusion — There would be no impact on the construction of three reservoirs and 3 miles of fence.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use is 200 RVDs, including 10 RVDs of vehicle dependent use, annually. These levels of use are projected to continue.

Conclusion — There would be no impact on ORV use levels.

SEVEN BLACKFOOT — PARTIAL ALTERNATIVE 3

Under this alternative, the southern roadless area, except for a 420-acre "peninsula" along the east boundary, would be recommended as suitable for designation as wilderness. The acreage of this suitable portion is 11,030. There would be no recreational ORV use on this 11,030 acres. The remaining two roadless areas totalling 9,220 acres and the 420-acre "peninsula" would be recommended as nonsuitable for wilderness.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 11,030 acres recommended as suitable appears natural, although it has a higher density of developments than the remainder of the WSA. Developments include 10 reservoirs, a spring, 10 miles of fence, and 8.25 miles of vehicle ways. There are three reservoirs projected for construction. The existing and proposed projects would be well screened by vegetative cover. There would be no recreational ORV use and checking of livestock and, for example, distributing salt, would be done on foot or horseback. The 13 existing and projected reservoirs would be maintained using heavy equipment ever 20 years and annually to haul fencing supplies. This level of motor vehicle use would no longer maintained by their passage the nonvegetated appearance of the vehicle ways. The revegetation of the vehicle ways would enhance the naturalness on 5 percent of the suitable portion.

The 9,220 acres recommended as nonsuitable has developments consisting of 3 miles of vehicle ways, six reservoirs and 0.25 mile of fence. In addition, 3 miles of new fence are projected to be built along the northern boundary. The existing and projected developments are generally well screened by the heavily dissected terrain or heavily forested areas of the northern portion of the WSA. The six water sources would continue to be maintained every 20 years using heavy equipment. The passage of motor vehicles for recreational use and to check livestock would continue/ Their passage would maintain the 3 miles of vehicles ways in their nonvegetated condition. The naturalness of the 9,220 acres would be maintained.

Solitude or Primitive and Unconfined Recreation

Approximately 80 percent of the 11,030 acres recommended as suitable contains outstanding opportunities for solitude due to the size of the area and the screening provided by vegetation or dissected terrain. Much of the boundary is below the "rim" and is not well screened from offsite impacts. This prevents the opportunities for solitude from being outstanding around the periphery. Recreational vehicle use and checking of livestock using motor vehicles would cease. This would enhance the feelings of solitude to outstanding in 6 percent of the suitable portion.

The 11,030 acres has outstanding opportunities for primitive and unconfined recreation activities, such as hiking and horseback riding. These opportunities would be retained.

The two roadless areas totalling 9,220 acres each have outstanding opportunities for solitude in conjunction with contiguous USFWS-CMR Wilderness Study Areas. The eastern area is well screened, both vegetatively from onsite and offsite activity. There is no motor vehicle use in it. The western area has coulee bottoms along the northern boundary where outstanding opportunities for solitude may be found. However, offsite activities visible from the southern boundary and motor vehicle use, which would continue along the 3 miles of vehicles ways, degrade solitude.

The two roadless areas have outstanding opportunities for primitive recreation in conjunction with the contiguous Wilderness Study Areas on USFWS.

Supplemental Values

The 11,030 acres recommended as suitable and the 9,220 acres recommended as nonsuitable each have scenic and paleontological values and douglas fir, which is unusual in this locale. There are no actions which impact these values.

Conclusion — Naturalness would be enhanced on 5 percent and opportunities for solitude would be enhanced 6 percent of the 11,030 acres recommended as suitable.

Wilderness values would be retained on the 9,220 acres recommended as nonsuitable.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species in the 11,030 acres recommended as suitable is mule deer, the population level of which ranges from 75 to 265. This portion of the WSA is not heavily hunted because the rough terrain makes hunting and game retrieval difficult. The closure of 8.25 miles of vehicle ways would cause hunting pressure to decrease. As a result, mule deer population levels are expected to increase to a range of 80 to 280.

Mule deer is the dominant big game species on the 9,220 acre portion. Their population level ranges from 60 to 200. Hunting in the rough terrain is generally on foot or horseback, although motor vehicles are used on 3 miles of vehicle ways. These hunting practices and level of hunting pressure would continue. Thus, population levels are expected to remain unchanged.

Conclusion — The mule deer population level is expected to increase to a range of 140 to 480.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

For the 11,030 acres recommended as suitable, checking of livestock, inspecting range development, and, for example, distributing salt, would be done on foot or horseback. The 13 reservoirs would be maintained every 20 years using heavy equipment and motor vehicles could be used annually to, for example, haul fencing supplies. The substitution of horses for motor vehicles would result in annual increased labor time of 105 hours and increased costs of $395 for seven operators.

For the 9,220 acres recommended as nonsuitable, checking of livestock and other livestock management practices would continue using motor vehicles or horses. There would be no increased costs or labor time incurred by the permittees.

Conclusion — There would be no impact on livestock management and existing range project maintenance levels. However, seven operators would incur increased costs of $395 and labor time of 105 hours annually. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

Three reservoirs would be constructed using heavy equipment. Three miles of fence on the northern boundary with USFWS-CMR would be built using motorized vehicles. No other range projects are proposed.

Conclusion — There would be no impact on the construction of three reservoirs and 3 miles of fence.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use in the 11,030 acre portion is currently 175 RVDs, including five vehicle dependent RVDs, annually. This occurs along 8.5 miles of vehicle ways. This use would be prohibited and so use would decline from 175 RVDs to zero.

For the 9,220 acres recommended as nonsuitable, ORV use levels are 25 RVDs, including five RVDs of vehicle dependent use. This would continue.

Conclusion — Recreational ORV use would decline from 200 RVDs to 25 annually.

SEVEN BLACKFOOT — ALL WILDERNESS ALTERNATIVE

Under this alternative, the entire 20,250 acres would be recommended as suitable for wilderness designation. The WSA is composed of three roadless areas of 3,950, 4,850 and 11,030 acres. There would be no recreational ORV use.

IMPACTS ON WILDERNESS VALUES

There would be no recreational vehicle use.

Naturalness

The WSA appears natural with developments well screened by rough terrain and numerous stands of pine. The developments include 11.25 miles of vehicle ways, 16 reservoirs, a spring, and 10.25 miles of fence. While these developments are scattered throughout the WSA, they are generally along the western portion. Three reservoirs would be constructed in the WSA and a fence would be built along the northern boundary with the USFWS-CMR. These developments would have an insignificant impact on the naturalness of the WSA. The 19 water developments would be maintained every 20 years using heavy equipment.

Checking of livestock and, for example, distribution of salt, would be done on foot or horseback. Heavy equipment would be used every 20 years to maintain 19 reservoirs, and motorized vehicles would be used annually to haul fencing supplies and salt. The passage of this level of motor vehicles would not maintain the 11.25 miles of vehicle ways in a nonvegetated condition. They would revegetate and enhance the naturalness over 2 percent of the area.

Solitude or Primitive and Unconfined Recreation

The dissected terrain and heavy vegetative cover provide outstanding opportunities for solitude over approximately 90 percent of the WSA. The dissection and vegetative screening are generally greater in the northern portion of the WSA. The WSA generally lies below a "rim" of benches around the area. Feelings of solitude are somewhat reduced on 5 percent of the WSA by offsite agricultural activities on this rim.

Recreational vehicle use would decline from 200 RVDs to zero and checking of livestock using vehicles would cease. This would enhance the feelings of solitude along the vehicle ways over 5 percent of the WSA.

The WSA has outstanding opportunities for primitive and unconfined recreation activities, such as hiking and horseback riding. These activities would continue at current levels.

Supplemental Values

The area has good scenic values and the presence of douglas fir, which is unusual in this locale, and paleontological resources. There are no actions which would impact these values.

Conclusion — The existing wilderness values would be retained. Naturalness on 2 percent of the WSA and opportunities for solitude on 5 percent of the WSA would be enhanced.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

Mule deer is the dominant big game species. The population level ranges from 135 to 465. The WSA is not heavily hunted because the rough terrain makes hunting and game retrieval difficult. The closure of 11.5 miles of vehicle ways would reduce hunting pressure along the western and southern boundaries. This reduction of hunting pressure would increase the population levels of mule deer to a range of 140 to 500.

Conclusion — Mule deer population levels would increase from a range of 135 to 465 to a range of 140 to 500.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

The checking of livestock, inspecting range developments, and, for example, distributing salt, would be done on foot or horseback. The reservoirs would continue to be maintained every 20 years using heavy equipment and motor vehicles could be used annually to, for example, haul fencing supplies. The substitution of horses for motor vehicles would result in increased labor time of 145 hours and increased costs of $540 annually. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — The permittees would incur annual increased costs of $540 and 145 hours of labor time.

IMPACTS ON CONSTRUCTION OF NEW RANGE IMPROVEMENTS

Three reservoirs would be constructed using heavy equipment. Three miles of fence on the northern boundary with USFWS-CMR would be built using motorized vehicles. No other range projects are proposed.

Conclusion — There would be no impact on the construction of three reservoirs and 3 miles of fence.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Annual recreational ORV use is 200 RVDs, including 10 RVDs of vehicle dependent use. This use would be prohibited. The level of use would decline from 200 to zero.

Conclusion — Recreational ORV use levels would decline from 200 RVDs annually to zero.

BURNT LODGE — PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)

Under the proposed action the entire 13,730 acres of Burnt Lodge WSA would be recommended as suitable for wilderness designation. There would be no recreational ORV use. The WSA is contiguous on the south to the USFWS Burnt Lodge Wilderness Study Area on CMR.

IMPACTS ON WILDERNESS VALUES

Naturalness

This WSA appears natural. The topography is defined by several ephemeral tributaries which trend southeast through CMR and into Fort Peck Reservoir on the Missouri River. There are parallel ridges between these coulees which also trend southeast. The 13.6 miles of vehicle ways generally are along these ridges. They reduce the naturalness of the WSA only from the ridges and are not apparent from the coulees. Four reservoirs and 6.5 miles of fence are the only range projects in the WSA. The reservoirs are in the coulees and generally well screened by terrain. The fences are substantially unnoticeable.

Use of motorized equipment to maintain the four reservoirs would occur every 20 years and to haul, for example, fencing supplies annually. However, the use of motorized vehicles to check livestock and for recreational ORV use would cease. This would allow the 13.6 miles of vehicle ways to revegetate. The naturalness along the ridges would be enhanced.

Solitude or Primitive and Unconfined Recreation

There are outstanding opportunities for solitude in the 50 percent of the WSA along the southeast border with CMR. This portion of the WSA is well dissected and topographically screened from offsite activities. The remainder of the WSA has good opportunities for solitude. The upper reaches of the coulees are screened because one is below. The offsite activities and there is moderate (25%) forest cover.

The elimination of 500 RVDs of recreational ORV use and the reduction of motorized use associated with livestock checking and management would enhance the feelings of solitude along the ridge tops in the northwest portions of the WSA. Offsite impacts are caused by road traffic and agricultural activity as close as a mile to the northwest boundary and traffic along the northeast and southwest boundary roads. So the feelings of solitude along the northwest half of the WSA would improve, but still not be outstanding due to offsite impacts.

There is a considerable diversity of primitive and unconfined recreational opportunities in the WSA, but that diversity is not sufficient for the opportunities to be outstanding. Mule deer and elk hunting are good.

Opportunities for hiking and horseback use and wildlife observation exist. Most of these opportunities exist throughout the WSA. The reduction of motorized vehicle use along the ridges would enhance primitive recreation opportunities along the ridges.

Supplemental Values

The only supplemental values of the WSA are the scenic qualities of the "breaks." No actions would enhance these values.

Conclusion — The naturalness of the WSA would be enhanced along the ridges in the northwest portion of the WSA. Outstanding opportunities for solitude in the southeast 50 percent of the WSA would be retained and opportunities for solitude in the northwest 50 percent of the WSA would be enhanced.

IMPACTS ON BIG GAME POPULATION LEVELS

Mule Deer

Mule deer are an abundant big game species in the WSA. Their population level ranges from 65 to 110. Hunting generally occurs along 13.6 miles of vehicle ways using motorized vehicles. The closure of these vehicle ways to motorized access would reduce hunting pressure in the WSA. This would result in increases in the mule deer population level to a range of 70 to 120.

Elk

Several transplants of elk since 1951 have restored this species to the area. The population level ranges from 160 to 195. The elimination of ORV use, particularly for hunting, would reduce hunting pressure on the herds. Elk are very susceptible to hunting pressure or harassment. It is expected that the population level would respond to the reduction in hunting pressure associated with the elimination of motorized hunting. On this basis, the population level is expected to increase to a range of 175 to 215.

Conclusion — The mule deer population level would increase from a range of 65 to 110 to a range of 70 to 120. The elk population level would increase from a range of 160 to 195 to a range of 175 to 215.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock inspection of four reservoirs on 6 miles of fence would be done on foot or horseback using hand tools. Maintenance of the four reservoirs would be done very 20 years using heavy equipment. Motor vehicles would be used annually to stockpile, for example, fencing supplies or salt. These reductions in the use of motorized vehicles would increase costs to three permittees by $660 and labor time of 175 hours annually. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — Annual labor requirements would increase by 175 hours and costs by $660.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use levels are approximately 500 RVDs, of which five are vehicle dependent. Use would decline to zero.

Conclusion — Recreational ORV use levels would decline from 500 to zero.

BURNT LODGE — NO WILDERNESS/ NO ACTION ALTERNATIVE

Under the proposed action the entire 13,730 acres of Burnt Lodge WSA would be recommended as nonsuitable for wilderness designation. The WSA is contiguous on the south to the USFWS Burnt Lodge Wilderness Study Area on CMR.

IMPACTS ON WILDERNESS VALUES

Naturalness

This WSA appears natural. The topography is defined by several ephemeral tributaries which trend southeast through the CMR and into Fort Peck Reservoir on the Missouri River. There are parallel ridges between these coulees which also trend southeast. The 13.6 miles of vehicle ways generally are along these ridges. They reduce the naturalness of the WSA only from the ridges and are not apparent from the coulees. Four reservoirs and 6.5 miles of fence are the only range projects in the WSA. The reservoirs are in the coulees and generally well screened to terrain. The fences are substantially unnoticeable.

Use of motorized equipment to maintain the four reservoirs would occur every 20 years and to haul, for example, fencing supplies annually. The use of motorized vehicles to check livestock and for recreational ORV use would continue at current levels. The passage of vehicles would maintain the 13.6 miles of vehicle ways in their nonvegetated condition. Present signs of man would continue, but naturalness of the WSA would be retained.

Solitude or Primitive and Unconfined Recreation

There are outstanding opportunities for solitude in the 50 percent of the WSA along the southeast border with CMR. This portion of the WSA is well dissected and topographically screened from offsite activities. The remainder of the WSA has good opportunities for solitude. The upper reaches of the coulees are screened because one is below the offsite activities and there is moderate (25%) forest cover. However, the continuation of current levels of motor vehicle use along the ridge tops would continue to reduce feelings of solitude in the northwest portion of the WSA.

There is a considerable diversity of primitive and unconfined recreational opportunities in the WSA, but that diversity is not sufficient for the opportunities to be outstanding. Mule deer and elk hunting are good. Opportunities for hiking and horseback use and wildlife observation exist. Since there are no additional activities that would degrade opportunities for primitive recreation, primitive recreation opportunities would be retained.

Supplemental Values

The only supplemental values of the WSA are the scenic qualities of the "breaks." No actions would impact these values.

Conclusion — The wilderness values of the WSA would be retained.

IMPACTS ON BIG GAME POPULATION LEVELS

Mule Deer

Mule deer are an abundant big game species in the WSA. Their population level ranges from 65 to 110. Hunting would continue along 13.6 miles of vehicle ways using motorized vehicles.

Current levels of livestock management and existing range improvement would continue.

As a result, the mule deer population is expected to continue at a level of between 65 and 110.

Elk

Several transplants of elk since 1951 have restored this species to the area. The population level ranges from 160 to 195. Hunting pressure on the herds associated with ORV use on 13.6 miles of vehicle ways would continue at current level.s The levels of motorized vehicle use and other aspects of livestock management would remain unchanged. Therefore, the population level is expected to continue at a range of 160 to 195.

Conclusion — There would be no impact on mule deer or elk population levels.

IMPACTS ON LIVESTOCK MANAGEMENT AND EXISTING RANGE PROJECT MAINTENANCE LEVELS

Checking livestock inspection of four reservoirs and 6 miles of fence would continue weekly using motor vehicles. Maintenance of the four reservoirs would be done every 20 years using heavy equipment. As such, there should be no additional labor time or increased costs to three permittees.

Conclusion — There would be no impacts on livestock management or range project maintenance levels.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Recreational ORV use levels are approximately 500 RVDs, of which five are vehicle dependent and are projected to continue.

Conclusion — There would be no impacts to recreational ORV use levels.

TERRY BADLANDS — PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE)

Under the proposed action, the eastern roadless area of 14,670 acres and 13,850 acres of the northern half of the western roadless area would be recommended as suitable for wilderness designation. There would be no recreational ORV use on the 28,520 acres recommended as suitable. The south half of the western roadless area comprising 14,430 acres would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 28,520 acres recommended as suitable contain the highest wilderness values of the WSA. Developments include 8.5 miles of fence, 20 water developments, and 13 miles of vehicle ways. There are also two outhouses associated with the 42.55 acre Recreation and Public Purpose Lease (R&PP) along the northern boundary. These developments are well screened by terrain and, in some cases, by isolated stands of pine. Some vehicle ways and fences are on ridges. These impact slightly the naturalness on 500 acres of the area. The 4 wells and 11 reservoirs would be maintained with heavy equipment every 20 years. There would be no recreational vehicle use and vehicle use associated with livestock checking would cease. Thus, passage of motorized vehicles would no longer maintain the nonvegetated appearance of 13 miles of vehicle ways. They would revegetate and the naturalness of 500 acres would be enhanced.

The 14,430 acres recommended as nonsuitable is apparently natural, although the density of development is higher. Developments include 10 water developments, 8 miles of fence, and 11.5 miles of vehicle ways. These developments are generally screened by flatter, but dissected terrain. Recreational ORV use and checking of livestock would continue with motor vehicles. Thus, passage of vehicles and recreational ORV use would maintain the vehicle ways. The 10 water developments would be maintained every 20 years using heavy equipment.

The action which would have a dominant effect on the naturalness of the area would be the projected coal mine. The mined area would cover approximately 50 percent of the southern nonsuitable portion.

While the mine was being operated, there would be very large draglines, trucks, and other equipment removing overburden and coal. After reclamation to surface contours, there would still be impacts on the naturalness due to "softened" erosion patterns and vegetative contrast due to changes in plant species composition. In short, the naturalness of the mined area would be obliterated. This would be apparent from 80 percent of the nonsuitable portion.

Solitude or Primitive and Unconfined Recreation

The 28,520 acres recommended as suitable has outstanding opportunities for solitude. In the eastern roadless area, this is due to extremely rough terrain. While in any of the many coulee bottoms one is very isolated. Even on the ridgetops one is generally isolated due to the many buttes and gumbo clay knobs. However, from some of the ridgetops one can look south over the Yellowstone River and the transportation corridors along it. This is possible because this roadless area generally slopes down to the river on the south. The western portion of the area recommended suitable is heavily dissected, too. It does not slope as abruptly to the Yellowstone River bottom and so feelings of solitude and isolation are also outstanding. There would be no recreational ORV use and only occasional heavy equipment use associated with reservoir and well maintenance. This would enhance feelings of solitude in the 28,520 acres. The projected coal mine would be as close as 2½ miles to the western boundary (Calypso Trail) of the eastern roadless area. However, the sight of much of the coal mine activity would not be visible because of the divide separating them. The mine would be visible from ridges in the higher portions of the areas as far as 6 miles to the northeast. This would be an offsite impact on solitude over 5 percent of the area. The sounds of the mine would generally not be evident. The wind blows to the northeast approximately 6 percent of the time and even then would not be audible because of barriers formed by terrain.

The offsite sights of mine activity would be evident from the northern portion of the western roadless area. The area does not overlook the mine site, but from ridges in the southern half of the area (approximately 25 percent of the area) such activity would be visible. The sounds of mine activity would be apparent when the wind was from the south to southeast due to the closeness of the mine and the lack of intervening ridges. This occurs approximately 25 percent of the time.

The area is used for hunting in the fall and sightseeing along the boundary roads when they are passible. These activities would be enhanced by the reduction of motorized use on vehicle ways and insignificantly degraded by the offsite activities associated with the projected mine. Thus opportunities for primitive and unconfined recreation are retained.

The 14,430 acre portion recommended as nonsuitable has pockets where outstanding opportunities of solitude exist, constituting 80 percent of the area. The activities associated with the projected mine would degrade the feelings of solitude over 35 percent of the area. This degradation would occur in a strip that moved from east to west as the mining occurred. At the end of mine life, the solitude would be regained over the original 80 percent of the area.

The portion recommended as nonsuitable does not have outstanding opportunities for primitive and unconfined recreation, although hunting is good. While the mine was in operation, these opportunities would be degraded over the entire mine tract (50 percent of the area).

Supplemental Values

The portion of the area recommended suitable has stands of limber pine and scenic values due to the action of erosion. These values would be retained.

The portion of the area recommended as nonsuitable has more modest scenic values due to the gentler terrain. These values would be destroyed over 50 percent of the area due to the effects of mining.

Conclusion — The naturalness of the portion recommended as suitable would be retained and enhanced due to elimination of recreational ORV use and motorized vehicle use associated with livestock checking despite offsite impacts due coal mining activity.

The wilderness values on the 14,430 acres of the WSA recommended as nonsuitable would be destroyed on as much as 50 percent of the area due to coal mining, although opportunities for solitude would be regained at the completion of mining.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

For the 28,520 acres recommended as suitable, the dominant big game species is mule deer. The population level of mule deer ranges from 70 to 115. Hunting from the north boundary road, the Calypso Trail, and along the south boundary would continue to provide some hunting pressure. The closure of 13 miles of vehicle way would decrease hunting pressure, primarily west of the Calypso Trail. As a result, deer population levels would increase to a range of 75 to 120.

Mule deer are also the dominant big game species for the 14,430 acres recommended as nonsuitable. The population level ranges from 35 to 55. Hunting pressure would decline somewhat due to coal mining activity. Vegetative disturbance due to the strip mining would cover approximately 275 acres a year, with approximately 2,000 acres disturbed at any one time. Since this is noncritical summer range, there would be insignificant impacts on the mule deer population levels.

Conclusion — The population level of mule deer would increase from a range of 100 to 170 to a range of 105 to 175.

IMPACTS ON LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT LEVELS

For 28,520 acres recommended as suitable, checking livestock, distributing salt, and inspection 20 water developments and 8.5 miles of fence would be done on foot or horseback. Motorized equipment would be used annually to haul fencing supplies and heavy equipment would be used to maintain 11 reservoirs and 4 wells. Approximately 155 hours of additional labor time and $576 of expense would be incurred by one major operator. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Livestock checking and other management practices and range improvement maintenance using heavy equipment would continue on the 14,430 acres recommended as nonsuitable. Coal mining would obliterate some range projects. However, these would be replaced, generally within no more than 8 years, as part of reclamation. This is considered to be an insignificant impact.

Conclusion — The checking of livestock and range development maintenance could continue, but at the additional annual expense of $576 and 155 hours labor time.

There would be no significant impacts on the 14,430 acres recommended as nonsuitable.

IMPACTS ON RECREATIONAL ORV USE LEVELS

For the 28,520 acres recommended as suitable, ORV use would be prohibited. This would result in a decline in use levels from 200 RVDs annually, including five vehicle dependent RVDs, to zero.

For the 14,430 acres recommended as nonsuitable, recreational ORV use could continue. However, due to the presence of mining activity on approximately half of the area, the level of use would decline from 200 to 125 RVDs annually.

Conclusion — Recreational ORV use would decline from 400 RVDs to 125 RVDs annually.

IMPACTS ON COAL MINING LEVELS

The 7,600 acres within the nonsuitable portion of the WSA would be mined for coal.

Conclusion — There would be no impacts associated with coal mining levels.

TERRY BADLANDS — NO WILDERNESS/NO ACTION ALTERNATIVE

Under this alternative, neither the eastern roadless area of 14,670 acres nor the western roadless area of 28,280 acres would be recommended as suitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Motorized vehicle use would continue and an open pit coal mine is projected to occur.

Naturalness

The 42,950 acres recommended as nonsuitable is apparently natural. Developments include 16.5 miles of fence, 30 water developments, and 24.5 miles of vehicle ways. There are also two outhouses associated with the 42.55 acre R&PP Lease along the northern boundary. These developments are well screened by terrain and, in some cases, by isolated stands of pine. Some vehicle ways and fences are on ridges. These impact slightly the naturalness on 1,500 acres of the area. The 9 wells and 16 reservoirs would be maintained with heavy equipment every 20 years. Recreational ORV and checking of livestock would continue with motor vehicles. Thus, passage of vehicles and recreational ORV use would maintain the 24.5 miles of vehicle ways.

The action which would have a major effect on the naturalness of the area would be the projected coal mine. The mined area would entail approximately 15 percent of the WSA. The mining of 7,600 acres would occur in the southwestern portion of the WSA.

While the mine was being operated, there would be very large draglines, trucks, and other equipment removing overburden and coal. After reclamation to surface contours, there would still be impacts on the naturalness due to "softened" erosion patterns and vegetative contrast due to changes in plant species composition. In short, the naturalness of the mined area would be obliterated. This would be apparent from 25 percent of the WSA.

Solitude or Primitive and Unconfined Recreation

Approximately 90 percent of the WSA has outstanding opportunities for solitude. This is due to the extremely rough terrain, which moderates towards the southwest. The western portion of the WSA is relatively flat, which in combination with localized topographic screening, provides feelings of solitude. Only on a narrow strip along the Yellowstone River and on some of the ridgetops are opportunities for solitude less than outstanding. Heavy equipment would continue to be used every 20 years to maintain 16 reservoirs and 9 water wells. Motorized vehicle use would continue at current levels.

The activity associated with the projected coal mine would degrade feelings of solitude in the southwest corner of the WSA. The opportunities for solitude would be eliminated in a strip degradated by mining activity that moved through the coal tract from east to west. This strip constitutes about 15 percent of the WSA. The impact would be less severe from ridgetops 2 to 3 miles north of the tract. Feelings of solitude would also be impacted by the sounds of mining activity in the same area and, 25 percent of the time, when prevailing winds carried them to the north and west.

The area does not have outstanding opportunities for primitive and unconfined recreation, although mule deer hunting is good. While the mine was in operation this opportunity would be reduced over 15 percent of the WSA. Scenic viewing, which generally occurs along boundary roads, would not be effected.

Supplemental Values

The area has stands of limber pine in the northwest portion and scenic values throughout, although predominantly in the eastern portion. Neither of these values would be reduced by current use or the projected coal mine.

Conclusion — The naturalness would be retained on 85 percent and outstanding opportunities for solitude on approximately 75 percent of the WSA.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer. The population level of mule deer ranges from 100 to 170. Hunting pressure would continue from the vehicle ways, the boundary road, the Calypso Trail and along the southeast boundary. Hunting pressure would decline somewhat due to coal mining activity. Vegetative disturbance due to strip mining would cover approximately 275 acres annually, with approximately 2,000 acres under reclamation. Since this is noncritical summer habitat, there would be insignificant impacts on the mule deer population level.

Conclusion — The population level of mule deer would continue to range between approximately 100 and 170.

IMPACTS ON LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT LEVELS

For the 42,950 acres, water development maintenance, checking livestock, distributing salt, and inspecting 30 water developments and 16.5 miles of fence would continue to be done using motorized equipment. The permittees would incur no additional costs or labor requirements.

Conclusion — There would be no impact on livestock or range improvement development levels.

IMPACTS ON RECREATIONAL ORV USE LEVELS

Current use levels are 400 RVDs, including 15 RVDs of visitor dependent use. Use would be restricted due to mining activity in the southwest corner of the WSA. The level of use would decline from 400 RVDs to approximately 325 RVDs.

Conclusion — Recreational ORV use levels would decline from 400 to 325 RVDs.

IMPACTS ON COAL MINING LEVELS

The 7,600 acres within the WSA would be mined for coal.

Conclusion — There would be no impacts associated with coal mining levels.

TERRY BADLANDS — PARTIAL WILDERNESS ALTERNATIVE 1

Under this alternative, 14,670 acres of the eastern roadless area would be recommended as suitable for wilderness designation. There would be no recreational ORV use on the 14,670 acres recommended as suitable. The western roadless area of 28,280 acres would be recommended as nonsuitable for wilderness designation.

IMPACTS ON WILDERNESS VALUES

Naturalness

The 14,670 acres recommended as suitable is very natural. Developments include 1.25 miles of fence, 4 water developments, and 3 miles of vehicle ways. There are also two outhouses associated with the 42.55 acres R&PP Lease along the northern boundary. These developments are well screened by terrain and, in some cases, by isolated stands of pine. The one well would be maintained with heavy equipment every 20 years. There would be no recreational vehicle use and vehicle use associated with livestock checking would cease. Thus, passage of motorized vehicles would no longer maintain the nonvegetated appearance of 3 miles of vehicle ways. It would revegetate and the naturalness would be enhanced. The 28,280 acres recommended as nonsuitable is apparently natural, although the density of development is higher. Developments include 26 water developments, 15.25 miles of fence, and 21.5 miles of vehicle ways. These developments are generally screened by flatter but dissected terrain. They reduce naturalness on approximately 1,500 acres. Recreational ORV use and checking of livestock would continue with motor vehicles. Thus, passage of vehicles and recreational ORV use would maintain the vehicles ways. The 8 wells and 16 reservoirs would be maintained every 20 years using heavy equipment.

The action which would have a significant effect on the naturalness of the area would be the projected coal mine. The mined area would entail approximately 25 percent of the western roadless area.

While the mine was being operated, there would be very large draglines, trucks, and other equipment removing overburden and coal. After reclamation to surface contours, there would still be impacts on the naturalness due to "softened" erosion patterns and vegetative contrast due to changes in plant species composition. In short, the naturalness of the mined area would be obliterated. This would be apparent from 40 percent of the nonsuitable portion, particularly in the southwest.

Solitude or Primitive and Unconfined Recreation

The 14,670 acres recommended as suitable has outstanding opportunities for solitude. This is due to extremely rough terrain. While in any of the many coulee bottoms one is very isolated. Even on the ridgetops one is generally isolated due to the many buttes and gumbo clay knobs. However, from some of the ridgetops one can look south over the Yellowstone River and the transportation corridors along it. This is possible because this roadless area generally slopes down to the river on the south. There would be no recreational ORV use and only occasional heavy equipment use associated with well maintenance. This would enhance feelings of solitude in the 14,670 acres.

The projected coal mine would be as close as 2½ miles to the western boundary (Calypso Trail) of the eastern roadless area. However, the sight of much of the coal mine activity would not be visible because of the divide separating them. The mine would be visible from ridges in the higher portions of the areas as far as 6 miles to the northeast. This would be an offsite impact on solitude over 2 percent of the area. The sounds of the mine would generally not be evident. The wind blows to the northeast approximately 6 percent of the time and ever then would not be audible because of barriers formed by terrain.

The area does not have outstanding opportunities for primitive recreation although the area is used for hunting in the fall and sightseeing along the boundary roads when they are possible. The closure of the 3 miles of vehicle ways would insignificantly improve these opportunities because current use is infrequent.

The western roadless area is also heavily dissected, particularly in the north half. The south half is gentler terrain with broader coulee bottoms. However, it does not slope as abruptly to the Yellowstone River bottom and so feelings of solitude and isolation are available over most (90%) of the area. Motor vehicles would continue to be used to check and manage livestock and for recreational ORV use. The activity associated with the projected coal mine would degrade feelings of solitude in portion of the western roadless area. These opportunities would be eliminated in the strip of mining activity that moved through the coal tract. This strip, where the sights of mining are pervasive, constitute approximately 20 percent of the western roadless area. The impact would be less severe from ridgetops 2 to 3 miles north of the tract. Feelings of solitude would also be impacted by the sounds of mining activity 2 to 2 miles north on ridgetops, when prevailing winds are from the south to southeast (25 percent of the time).

The western roadless area recommended as nonsuitable does not have outstanding opportunities for primitive and unconfined recreation, although hunting is good. While the mine was in operation, these opportunities would be degraded over the entire mine tract (25 percent of the area).

Supplemental Values

The portion of the area recommended as suitable has scenic values due to the action of erosion. These would be retained.

The western roadless area recommended as nonsuitable has stands of limber pine and less spectacular scenic values. The limber pine stands would not be impacted. The scenic values would be destroyed over 25 percent of the area due to the effects of mining.

Conclusion — The wilderness values of 14,670 acres recommended as suitable would be slightly enhanced due to reductions in motor vehicle use and despite offsite impacts due to coal mining.

For the 28,280 acres recommended as nonsuitable, the wilderness value of naturalness would be lost on 25 percent of the area due to coal mining activities. These activities would degrade solitude on 20 percent of the area and reduce outstanding opportunities from 90 percent to 75 percent of the area.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

Mule deer is the dominant big game species in the eastern roadless area recommended as suitable. Hunting pressure occurs from the north boundary road, the Calypso Trail, and the southern boundary. The closure of 3 miles of vehicle way will not significantly reduce this hunting pressure. Therefore, the mule deer population level should remain at a range of from 35 to 60.

Mule deer is also the dominant big game species on the western roadless area recommended as nonsuitable. The population level ranges from 65 to 110. Hunting pressure would continue around the boundary and along vehicle ways, but decline somewhat in the active portions of the coal tract. Vegetative disturbance at any one time during coal mining would be 6 percent (approximately 2,000 acres) of the nonsuitable portion. These factors would have an insignificant impact on the population level of the nonsuitable portion.

Conclusion — The population level of mule deer would remain at a level of 100 to 170.

IMPACTS ON LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT LEVELS

For the 14,670 acres recommended as suitable, checking livestock, distributing salt, and inspecting 1.25 miles of fence and 4 water projects would be done on foot or horseback. Motorized equipment would be used annually to haul fencing supplies and heavy equipment would be used every 20 years to maintain the well. Approximately $70 of additional expense and 20 hours of labor annually would be incurred by one major permittee.

Livestock checking and other management practices and range improvement maintenance using heavy equipment would continue on the 28,280 acres recommended as nonsuitable. Coal mining would obliterate some range projects. However, these would be replaced, generally within no more than 8 years, as part of reclamation. This is considered to be an insignificant impact.

Conclusion — For the portion of the WSA recommended as suitable, additional labor of 20 hours and expenses of $70 annually would be incurred. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

There would be no significant impacts on the 28,280 acres recommended as nonsuitable.

IMPACTS ON RECREATIONAL ORV USE LEVELS

For the 14,670 acres recommended as suitable, ORV use would be prohibited. This would result in a decline from annual use levels of 25 RVDs to zero.

For the 28,280 acres recommended as nonsuitable, recreational ORV could continue. However, due to the influence of mining on approximately 25 percent of the area, the level of use would decline from 375 to 300 RVDs annually.

Conclusion — Recreational ORV use would decline from 400 RVDs to 300 RVDs annually.

IMPACTS ON COAL MINING LEVELS

The 7,600 acres within the nonsuitable portion of the WSA would be mined for coal.

Conclusion — There would be no impacts associated with coal mining levels.

TERRY BADLANDS — ALL WILDERNESS ALTERNATIVE

Under this alternative, the eastern roadless area of 14,670 acres and the western roadless area of 28,280 acres would be recommended as suitable for wilderness designation. There would be no recreational ORV use or coal mining.

IMPACTS ON WILDERNESS VALUES

There would be no recreational ORV use and no coal mining actions.

Naturalness

The 42,950 acres recommended as suitable appears natural. Developments include 16.5 miles of fence, 30 water developments, and 24.5 miles of vehicle ways. There are also two outhouses associated with the 42.55 acre R&PP Lease along the northern boundary. These developments are well screened by terrain and, in some cases, by isolated stands of pine. Some vehicle ways and fences are on ridges. These impact slightly the naturalness on 1,500 acres of the area.

The 9 wells and 16 reservoirs would be maintained with heavy equipment every 20 years. There would be no recreational vehicle use and vehicle use associated with livestock checking would cease. Thus, passage of motorized vehicles would no longer maintain the nonvegetated appearance of 24.5 miles of vehicle ways. They would revegetate and the naturalness of 1,500 acres (3 percent of the area) would be enhanced.

Solitude or Primitive and Unconfined Recreation

Approximately 90 percent of the 42,950 acres has outstanding opportunities for solitude. This is due to extremely rough terrain, which moderates towards the southwest. The western portion of the WSA is relatively flat, which in combination with localized topographic screening, provides feelings of solitude. Only on a narrow strip along the Yellowstone River and on some of the ridgetops are opportunities for solitude less than outstanding. heavy equipment would continue to be used every 20 years to maintain 16 reservoirs and 9 water wells. The elimination of other motorized vehicle use would enhance the feelings of solitude available in the unit, particularly the western portion where most vehicle ways exist. The opportunities for solitude would be enhanced over the area.

The area does not have outstanding opportunities for primitive recreation. Mule deer hunting on foot or horseback would be slightly enhanced. Scenic viewing which generally occurs along boundary roads would not be affected.

Supplemental Values

The area has stands of limber pine in the northwest portion and scenic values throughout, although predominantly in the eastern portion. No actions would affect these values.

Conclusion — The outstanding opportunities for solitude on 90 percent of each of the two roadless areas and the naturalness of the area would be retained. Naturalness and solitude and primitive recreation opportunities would be enhanced due to elimination of most forms of motor vehicle use.

IMPACTS ON BIG GAME POPULATION LEVELS — MULE DEER

The dominant big game species is mule deer, population level of which ranges from 100 to 170. The closure of 24.5 miles of vehicle way would reduce hunting pressure in the western portion of the WSA. Hunting pressure would continue from the boundary roads, the Calypso Trail and along the southeast boundary. The effect of this reduction on hunting pressure would be that the population level would increase to a range of 110 to 180.

Conclusion — The mule deer population level would increase from a range of 100 to 170 to a range of 110 to 180.

IMPACTS ON LIVESTOCK MANAGEMENT AND RANGE IMPROVEMENT DEVELOPMENT LEVELS

Checking livestock, distributing salt, and inspecting 30 water developments and 16.5 miles of fence would be done on foot or horseback. Motorized equipment could be used annually to haul fencing supplies and heavy equipment would be used every 20 years to maintain 16 reservoirs and 9 wells. Approximately $1,105 of additional expense and 295 additional hours of labor would be incurred by five permittees. However, two would bear 85 percent of these impacts. This additional time and expense is required for travel by foot or on horseback, rather than by motorized vehicle, for the tasks of inspecting livestock, facilities, and range condition and, for example, distributing salt.

Conclusion — Five permittees would together incur annual additional cost of $1,105 and additional labor time of 295 hours.

IMPACTS ON RECREATIONAL ORV USE LEVELS

ORV use would be prohibited. This would result in a decline in use levels from 400, including 15 vehicle dependent, to zero.

Conclusion — Recreational ORV use would decline from a level of 400 RVDs, including 15 vehicle dependent RVDs, to zero.

IMPACTS ON COAL MINING LEVELS

The 7,600 acres within the WSA would not be mined for coal.

Conclusion — The opportunity to mine coal in the WSA would be foregone.

FIVE

CONSULTATION AND COORDINATION

CONSULTATION AND COORDINATION IN DEVELOPING THE PROPOSED ACTION AND ALTERNATIVES

The Missouri Breaks Wilderness Draft Environmental Impact Statement (EIS) was prepared by specialists from the Bureau of Land Management's (BLM's) Lewistown District Office, with assistance from BLM's Big Dry, Havre, Judith, Phillips and Valley Resource Area Offices and the Montana State Office. Disciplines and skills used to develop this EIS were: vegetation and range use, animal husbandry, soils, recreation, climate, sociology, economics, printing, public affairs and typing. Writing for this EIS began in May 1981: research began in 1978 with the wilderness review required by the Federal Land Policy and Management Act (FLPMA). The process included inventories of resources, public participation and coordination with other agencies, organizations and individuals. Consultation and coordination occurred in a number of ways and care was taken that the planning criteria used in preparing this EIS are consistent with other land management agencies. An overview of the wilderness review process is in Appendix 1.2, the Chronology of the Wilderness Review.

An active public involvement process aided in developing this EIS. Public opinion was elicited through public meetings in Jordan, Lewistown, Havre, Malta and Glasgow; personal interviews; mailings to an extensive list of groups and individuals in affected areas; a notice in the Federal Register and follow up mailings. The major emphasis of the public involvement process was identifying issues the public wanted considered in this EIS. Chapter 1 explains the scoping and issue identification process in more detail.

Informal consultation with the U.S. Fish and Wildlife Service regarding threatened and endangered species took place and is continuing during the preparation of this EIS. The Montana State Historical Preservation Officer was consulted during the development of the Draft EIS.

AGENCIES AND ORGANIZATIONS CONSULTED

The Missouri Breaks Wilderness EIS Team consulted and/or received comments from the following during the preparation of the Draft EIS.

Business and Industry

True Oil Company
Amoco Production Company
Continental Oil Company (Conoco)
Inland Forest Resource Council
Northern Bank of Montana (Big Sandy)
Atlantic Richfield Company
Rocky Mountain Oil and Gas Association Inc.
Natural Gas Corporation of California
Fuel Resources Development Co. (Fuelco)
Wexpro Company
Transco Exploration Company
Marathon Oil Company

State Agencies and Organizations

Montana Department of Fish, Wildlife and Parks
Montana Department of State Lands
Governors Natural Resources Council
Montana State Historical Preservation Officer

County Commissioners and Planning Boards

Custer County
Valley County
Phillips County
Blaine County
Fergus County
Garfield County
Prairie County

Federal Agencies

U.S. Fish and Wildlife Service
Bureau of Mines
Council on Environmental Quality
U.S Geological Survey
Environmental Protection Agency
Bureau of Reclamation
Department of Defense
Corps of Engineers
Army
Air Force

CONSISTENCY WITH OTHER PLANS

The Federal Land Policy and Management Act (FLPMA) requires that BLM Plans be as consistent as possible with other agency plans, while considering federal laws, policies and regulations.

Other federal agency, city, county and state plans in the EIS area were considered in the preparation of this report.

Federal Agencies

Three of the wilderness study areas are contiguous with four administratively endorsed WSAs in the Charles M. Russell National Wildlife Refuge. It appears there are no conflicts with the U.S. Fish and Wildlife Service in the study, recommendation or designation of these areas. The potential exists for a cooperative agreement between the two agencies on the management of contiguous wilderness areas.

Through conversations with the United States Air Force, low level flights over several WSAs were brought to BLM's attention. There is a conflict between these flights and wilderness quality, which is considered in this suitability report. If these flights become a problem in a designated wilderness area, they could be discussed with the Air Force to determine if any solutions exist.

State of Montana

A recently signed Memorandum of Understanding among the BLM, the U.S. Forest Service and the Governor created the Natural Resources Council. This council will serve as a clearing house for consultation on all natural resource issues. This group will study the recommendations of this report for consistency.

City-County Plans

No specific conflict with wilderness study has been identified in any city or county plans. Specific issues which deal with economic impacts of wilderness on affected counties are identified and discussed in this document.

CONSULTATION AND COORDINATION IN REVIEWING THE DRAFT EIS AND DEVELOPING THIS FINAL EIS

COMMENTS REQUESTED ON THE DRAFT

Comments on the Draft EIS have been requested from the following agencies and organizations and individuals too numerous to list.

Congressional Offices

Office of Senator Baucus
Office of Senator Melcher
Office of Congressman Marlenee
Office of Congressman Williams

Federal Agencies

U.S. Fish and Wildlife Service
Bureau of Mines
Council on Environmental Quality
U.S. Geological Survey
Environmental Protection Agency
Federal Energy Regulatory Commission
Department of Transportation
Bureau of Reclamation
Department of Defense
  Army Corps of Engineers
  Air Force

County Commissioners and Planning Boards

Custer County
Valley County
Phillips County
Blaine County
Fergus County
Garfield County
Prairie County

Other Organizations

Montana Wildlife Federation
Sierra Club
Environmental Information Center
Northern Plains Resource Council
Montana Wilderness Association
Montana-Wyoming Representative The Wilderness Society
Montana Representative Defenders of Wildlife
Fergus County Stockgrowers
Montana Guides and Outfitters Association
Western Environmental Trade Association
Five Valley Audubon Society
Friends of the Earth
Good Guys Cycle Club
Grass Range CS Grazing District

Harlem Rod and Gun Club
Lewistown Rod and Gun Club
Missouri Breaks Multiple-Use Association
Montana Wilderness Institute
Montana Stockgrowers
Square Butte Grazing Association
South Phillips Cooperative State Grazing District
Phillips County Livestock Association
PN Grazing Association
North Central Montana Stockgrowers Association
Montana Public Lands Council
Hinsdale Livestock Company
Missouri Breaks Protective Association

State Agencies and Organizations

Montana Department of Fish, Wildlife and Parks
Montana Department of State Lands
Governors Natural Resources Council
Montana State Historical Preservation Officer

DISTRIBUTION OF THIS FINAL EIS

This Final EIS is being distributed to a mailing list which was derived from the Draft EIS mailing list. It has been updated to include those who commented on the Draft EIS or requested copies.

LIST OF PREPARERS

The following people were involved with the preparation of this Final EIS.

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MONTANA STATE OFFICE

Branch of Administrative Services, Printing and Graphics Section

*District coordinators

PUBLIC COMMENTS ON THE DRAFT EIS

An intense public review was conducted on the Draft EIS. After the Draft EIS was released to the public and filed with the Environmental Protection Agency on May 14, 1982, a period of 74 days was allowed for public review and comment. The *Federal Register* of May 14, 1982, notified the public that the EIS had been published and announced public hearing at Jordan, Terry, Malta, Winifred and Helena, Montana, during the week of June 16-24.

A news release was issued on May 16, 1982, to national wire services, daily and weekly newspapers and radio and television stations throughout Montana announcing that the Draft EIS was available. The news release, which received wide coverage, summarized the Draft and gave dates, times and locations for public hearings. A professional court reporter prepared a verbatim transcript of each public hearing. These transcripts have been included in this document.

Approximately 1,500 copies of the Draft EIS were sent to organizations, individuals and to those groups who indicated interest in receiving wilderness materials. Public reading copies were available at BLM offices in Washington, D.C., Billings, Glasgow, Havre, Malta, Miles City and Lewistown, Montana, at Montana universities and colleges and at public libraries in the area covered by the EIS. Eighty-four letters were received commenting on the Draft. The BLM responses to all oral and written comments appear following the reprinted letters and transcripts. Each person's testimony and each letter received were numbered. Those that required a BLM response were given an alphabetical heading (A., B., C., etc.). To find the BLM response to the specific comment, locate the corresponding number and alphabetical identification in the response section.

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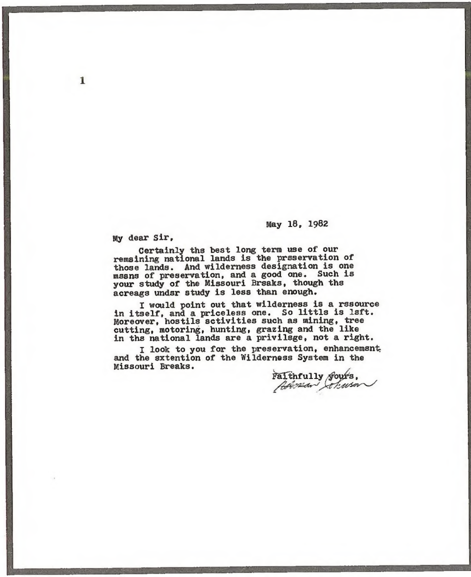
1



May 18, 1982

My dear Sir,

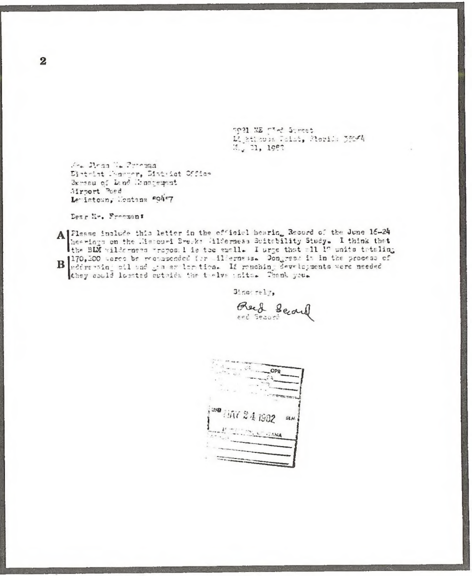
Certainly the best long term use of our remaining national lands is the preservation of those lands. And wilderness designation is one means of preservation, and a good one. Such is your study of the Missouri Breaks, though the acreage under study is less than enough.

I would point out that wilderness is a ressource in itself, and a priceless one. So little is left. Moreover, hostile activities such as mining, tree cutting, motoring, hunting, grazing and the like in the national lands are a privilege, not a right.

I look to you for the preservation, enhancement, and the extention of the Wilderness System in the Missouri Breaks.

Faithfully yours,
[illegible] Johnson

2



[illegible] NE [illegible] Street
Lighthouse Point, Florida 33064
May 21, 1982

Mr. Glenn W. Freeman
District Manager, District Office
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Freeman:

A Please include this letter in the official hearing Record of the June 16-24 hearings on the Missouri Breaks Wilderness Suitability Study. I think that the BLM wilderness proposal is too small. I urge that all 12 units totaling

B 170,200 acres be recommended for wilderness. Congress is in the process of addressing oil and gas exploration. If ranching developments were needed they could located outside the twelve units. Thank you.

Sincerely,
Reed Secord
Reed Secord

OPR
USD MAY 24 1982 BLM
MONTANA

3

ACTION

RECEIVED

USDI MAY 25 1982 BLM

610 East Sussex Avenue
Missoula, Montana 59801
May 20, 1982

Glenn W. Freeman
District Manager
District Office
Bureau of Land Management
Lewistown, Montana 59457

Dear Mr. Freeman:

Thank you for the opportunity to comment on the "Missouri Breaks Wilderness Suitability Study EIS". Generally, I support the five wilderness recommendations (Terry Badlands, Burnt Lodge, Antelope Creek, Cow Creek, and Seven Blackfoot). However, the Terry Badlands

A Unit would have greater integrity if the middle segment of Crooked Cr. was included. Any state or private land within the above units should be acquired.

B It is interesting to note that one of the often repeated myths concerning wilderness is that a roadless unit will remain the same without designation. Livestock facilities, primitive and constructed roads, energy exploration, and vegetation alteration, taken cumulatively have dramatic impacts on the character of a roadless area and the region in which it is situated. An example in this area is the new road built through the Musselshell Breaks WSA. Although this unit seems to be a valuable addition to the Wilderness System, the new road alters the wilderness characteristics. How many times is this going to be repeated in the other roadless units not recommended for wilderness? Other values (wildlife, soil erosion, aesthetics) are impacted through this action.

C Coal development adjacent to the Terry Badlands Unit poses future threat to this unit's integrity. Efforts should be made to prevent mining in this area.

The EIS would have been easier to read if all the data and discussion for each roadless unit had been grouped together. Thank you for the this chance to comment.

Sincerely,

Marlen Tweten

CONOCO

E. Fred Girdeall
Director Administration and Personnel

Conoco Inc.
555 17th Street
Denver, CO 80202
(303) 575-6123

4(p.1)

[illegible] 7 1982 BLM

ACTION

June 4, 1982

Glenn W. Freeman, District Manager
Lewiston District
BLM
Airport Road
Lewistown, Montana 59457

Re: Missouri Breaks DEIS

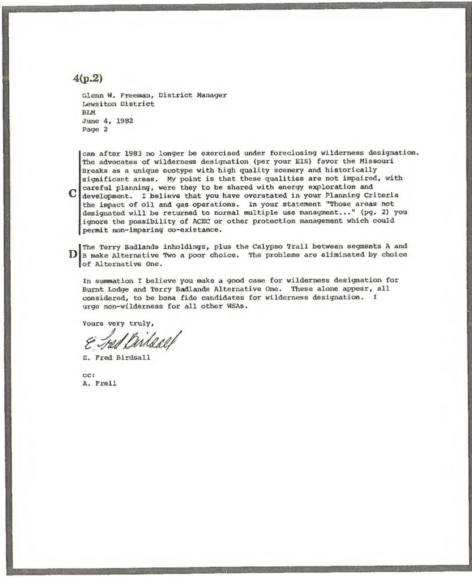
Dear Mr. Freeman:

A I compliment you on an extremely well-done Suitability Study on the Missouri Breaks WSAs. You have thoroughly investigated all relevant factors contributing to the wilderness vs. non-wilderness designation arguments. My difference of opinion lies primarily in how you have weighed those factors. For example, you cite the ORC Study that most of the nation feels that local attitudes are more important than national regarding wilderness set asides, and you further note that local attitudes are universally negative towards wilderness designation. It is not evident that you have taken this into account in recommending approximately half (80 thousand out of 170 thousand acres) of your WSAs for wilderness designation. In particular insufficient cognizance is given to wilderness designation in Cow Creek, Antelope Creek, and Seven Blackfoot WSAs.

I support your "no wilderness" preferred alternatives for the seven smaller WSAs (Dog Creek South, Stafford, Ervin Ridge, Woodhawk, Bridge Coulee, Musselshell Breaks, and Billy Creek). Your logic is sound and your reasons for eliminating these small WSAs are well-considered and compelling.

B I very much object to the notion of purchasing inheld acreage in order to consolidate and create troublefree boundary management in Terry Badlands, Cow Creek, and Seven Blackfoot WSAs. The costs are obviously considerable, and do not appear to be included in your Economic Impact tabulations. Throughout the legislative history of wilderness debate it has been clear that the intent was to set aside that which already qualified and not to create wilderness. Acquisition of land to put into the NWPS is not only an expensive bad idea but also lies outside the framing intent. Parks, refuges and the like sometimes are acquired, but never to my knowledge has wilderness been acquired.

C The inclusion of 31,190 acres of high potential natural gas lands within the 79,770 acres recommended wilderness is unconscionable. It is sufficient reason, in itself, to reject lands south of the Bears Paw Mountains from further wilderness consideration, with possible redesignation as ACECs. The fact that Cow Creek WSA, for example, has seven dry gas wells which have revegetated to the extent that the BLM considers their sites and associated roads of such insignificant impact that you would recommend wilderness designation is marvelous testimony to the compatibility of oil and gas activity with wilderness values. The problem, of course, is that this proved compatibility



4(p.2)

Glenn W. Freeman, District Manager
Lewsiton District
BLM
June 4, 1982
Page 2

C can after 1983 no longer be exercised under foreclosing wilderness designation. The advocates of wilderness designation (per your EIS) favor the Missouri Breaks as a unique ecotype with high quality scenery and historically significant areas. My point is that these qualities are not impaired, with careful planning, were they to be shared with energy exploration and development. I believe that you have overstated in your Planning Criteria the impact of oil and gas operations. In your statement "Those areas not designated will be returned to normal multiple use managment..." (pg. 2) you ignore the possibility of ACEC or other protection management which could permit non-imparing co-existance.

D The Terry Badlands inholdings, plus the Calypso Trail between segments A and B make Alternative Two a poor choice. The problems are eliminated by choice of Alternative One.

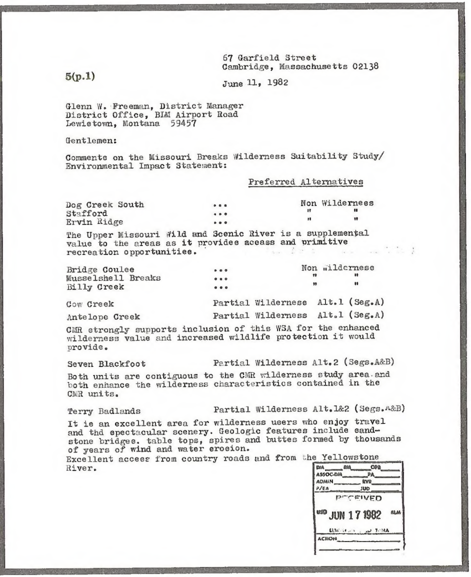
In summation I believe you make a good case for wilderness designation for Burnt Lodge and Terry Badlands Alternative One. These alone appear, all considered, to be bona fide candidates for wilderness designation. I urge non-wilderness for all other WSAs.

Yours very truly,

E. Fred Birdsall

E. Fred Birdsall

cc:
A. Frell



5(p.1)

67 Garfield Street
Cambridge, Massachusetts 02138

June 11, 1982

Glenn W. Freeman, District Manager
District Office, BLM Airport Road
Lewistown, Montana 59457

Gentlemen:

Comments on the Missouri Breaks Wilderness Suitability Study/ Environmental Impact Statement:

		Preferred Alternatives
Dog Creek South	...	Non Wilderness
Stafford	...	" "
Ervin Ridge	...	" "

The Upper Missouri Wild and Scenic River is a supplemental value to the areas as it provides access and primitive recreation opportunities.

Bridge Coulee	...	Non Wilderness
Musselshell Breaks	...	" "
Billy Creek	...	" "
Cow Creek	Partial Wilderness	Alt.1 (Seg.A)
Antelope Creek	Partial Wilderness	Alt.1 (Seg.A)

CMR strongly supports inclusion of this WSA for the enhanced wilderness value and increased wildlife protection it would provide.

Seven Blackfoot	Partial Wilderness Alt.2 (Segs.A&B)

Both units are contiguous to the CMR wilderness study area and both enhance the wilderness characteristics contained in the CMR units.

Terry Badlands	Partial Wilderness Alt.1&2 (Segs.A&B)

It is an excellent area for wilderness users who enjoy travel and thd spectacular scenery. Geologic features include sandstone bridges. table tops, spires and buttes formed by thousands of years of wind and water erosion.
Excellent access from country roads and from the Yellowstone River.

DM___ BM___ OPR___
ASSOC-DM___ PA___
ADMIN___ RVR___
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USD JUN 17 1982 BLM
LEWISTOWN, MONTANA
ACTION___

5(p.2)

June 11, 1982
PAGE 2

Preferred Alternative

Burnt Lodge All Wilderness

High priority for wilderness characteristics--some benefits to watershed protection, soils and to the elk herd in the unit. Contiguity to the Burnt Lodge WSA of the Charles M.Russell National Wildlife Refuge. It stands on its own without the CMR unit.

Woodhawk All Wilderness Alternative

A This is an 8,100 acre WSA most of which consists of scenic, high quality wilderness. Of supplemental value is its historical background as well as the Upper Missouri Wild and Scenic River which provides access and recreational opportunities.

These factors outweigh the 59.2% post-FLPMA oil and gas leases and pending leases. The problem of acess ways in the upkeep or replacement of the reservoirs in the southern portion of the unit can, I believe, be worked out without significant damage to wilderness quality.

B BLM states in the Draft Suitability Study/EIS, "At present, Woodhawk is being looked at as part of a block of wilderness potential which also includes Cow Creek and Antelope Creek..." I hope this proposed outlook will prove to be favorable to Woodhawk as well as to the other areas.

Sincerely,
Mildred Leonard
Mildred Leonard

6

Crow Rock Rte.
Miles City, Mt. 59301

June 17,1982

Glenn W. Freeman
District Manager
District Office, BLM
Airport Road
Lewistown, Mt. 59457

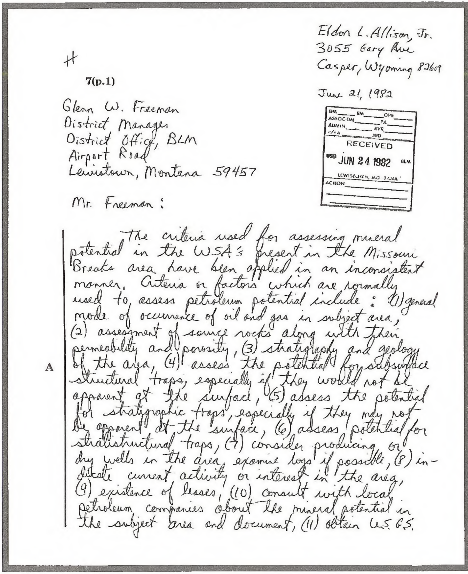
Dear Mr. Freeman:

A With the exceptions of Sec. 1, - 2, - 3, - 10, - 11, - 12, and N 1/2 Sec 14,- T 12 N, R 50 E, I am opposed to adding anymore lands to the National Wilderness Preservation System. The above mentioned lands meet all wilderness characteristics and values and should be managed as such.

All other lands in the Terry Badlands study group ~~are~~ are best managed under the Multiple Use concept. With proper attention given to their contribution to America's food, fiber, energy, and recreational needs.

Sincerely,
John F Pfaff
John F. Pfaff

DM
JUN 21 1982 BLM
ACTION



Eldon L. Allison, Jr.
3055 Gary Ave
Casper, Wyoming 82609

June 21, 1982

H

7(p.1)

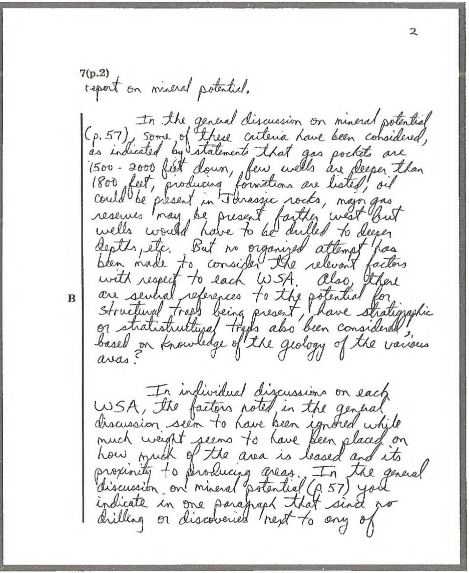
DM RM OPR
ASSOC.DM PA
ADMIN RVR
JUD
RECEIVED
USD JUN 24 1982 BLM
LEWISTOWN, MONTANA
ACTION

Glenn W. Freeman
District Manager
District Office, BLM
Airport Road
Lewistown, Montana 59457

Mr. Freeman:

A

The criteria used for assessing mineral potential in the W.S.A's present in the Missouri Breaks area have been applied in an inconsistent manner. Criteria or factors which are normally used to assess petroleum potential include: (1) general mode of occurrence of oil and gas in subject area, (2) assessment of source rocks along with their permeability and porosity, (3) stratigraphy and geology of the area, (4) assess the potential for subsurface structural traps, especially if they would not be apparent at the surface, (5) assess the potential for stratigraphic traps, especially if they may not be apparent at the surface, (6) assess potential for stratistructural traps, (7) consider producing or dry wells in the area, examine logs if possible, (8) indicate current activity or interest in the area, (9) existence of leases, (10) consult with local petroleum companies about the mineral potential in the subject area and document, (11) obtain U.S.G.S.



2

7(p.2)

report on mineral potential.

B

In the general discussion on mineral potential (p. 57), some of these criteria have been considered, as indicated by statements that gas pockets are 1500 - 2000 feet down, few wells are deeper than 1800 feet, producing formations are listed, oil could be present in Jurassic rocks, major gas reserves may be present farther west but wells would have to be drilled to deeper depths, etc. But no organized attempt has been made to consider the relevant factors with respect to each WSA. Also, there are several references to the potential for structural traps being present, have stratigraphic or stratistructural traps also been considered, based on knowledge of the geology of the various areas?

In individual discussions on each WSA, the factors noted in the general discussion seem to have been ignored while much weight seems to have been placed on how much of the area is leased and its proximity to producing areas. In the general discussion on mineral potential (p. 57) you indicate in one paragraph that since no drilling or discoveries next to any of

7(p.3)

"six other WSA's" have been made, the mineral potential for these areas are rated as being low to moderate. From appearances, it seems that you are rating these areas based on no data.

B As the document stands, there is no way to consistently evaluate and compare the mineral potential of each of the WSA's. No basis for defining "high," "moderate," or "low" potential has been established. By utilizing each of the criteria suggested earlier and applying these to each of the WSA's, a rational basis for comparison would be established

For Figure 3.1 (p. 38) someone should consult the geologist about where to draw the line between formations of Tertiary and Cretaceous age.

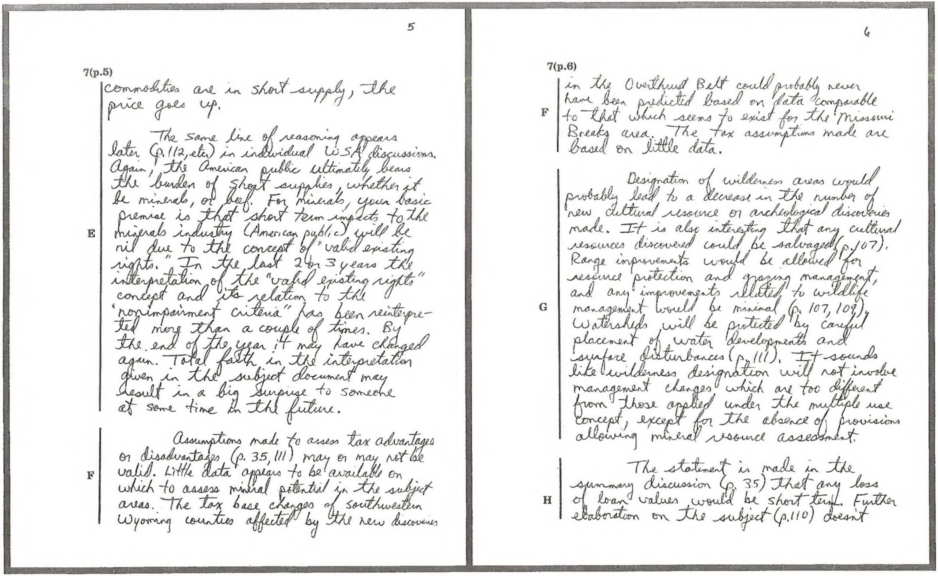
C If bentonite in the Antelope Creek WSA is considered to be suitable for taconite and foundry use, why is it only considered to be of "moderate" potential? Bentonite which can be used for the above stated purposes is usually considered to be locatable and has a good chance of eventually resulting in

7(p.4)

C a mineral patent.

D In the section where the impacts of an all wilderness alternative are to be considered with respect to minerals (p. 108), someone seems to have gotten turned around backwards. Instead of discussing the impact of wilderness designation on minerals, they discuss the impact of minerals on wilderness. The impact of wilderness on minerals would generally consist of a decrease in exploration, leading to a reduction in new discoveries, and therefore a decrease in mineral commodities. The impacts of mineral activities on wilderness should be discussed in some other section.

E In some of the introductory material (p. 35) the statement is made that recommended wilderness acreage which contains low to moderate potential for natural gas and oil will not significantly impact the minerals industry. This seems to be a pretty big statement considering the apparent lack of data and cursory examination given to the mineral potential of the WSA's. Also, while the mineral industry may receive any direct effects, the American public bears the ultimate burden, not industry. When mineral



7(p.5)

commodities are in short supply, the price goes up.

E The same line of reasoning appears later (p.112, etc) in individual WSA discussions. Again, the American public ultimately bears the burden of short supplies, whether it be minerals, or beef. For minerals, your basic premise is that short term impacts to the minerals industry (American public) will be nil due to the concept of "valid existing rights." In the last 2 or 3 years the interpretation of the "valid existing rights" concept and its relation to the "nonimpairment criteria" has been reinterpreted more than a couple of times. By the end of the year it may have changed again. Total faith in the interpretation given in the subject document may result in a big surprise to someone at some time in the future.

F Assumptions made to assess tax advantages or disadvantages (p. 35, 111) may or may not be valid. Little data appears to be available on which to assess mineral potential in the subject areas. The tax base changes of southwestern Wyoming counties affected by the new discoveries

7(p.6)

F in the Overthrust Belt could probably never have been predicted based on data comparable to that which seems to exist for the Missouri Breaks area. The tax assumptions made are based on little data.

G Designation of wilderness areas would probably lead to a decrease in the number of new cultural resource or archeological discoveries made. It is also interesting that any cultural resources discovered could be salvaged (p.107). Range improvements would be allowed for resource protection and grazing management, and any improvements related to wildlife management would be minimal (p. 107, 109). Watersheds will be protected by careful placement of water developments and surface disturbances (p. 111). It sounds like wilderness designation will not involve management changes which are too different from those applied under the multiple use concept, except for the absence of provisions allowing mineral resource assessment.

H The statement is made in the summary discussion (p. 35) that any loss of loan values would be short term. Further elaboration on the subject (p.110) doesn't

7(p.7)

H seem to support this assumption. If the Federal Land Bank and FHA indicate that they do not place any security value for lending purposes on land in wilderness, and all loans are considered from "the long-term point of view," the assumption made would seem to be invalid.

I You indicate that an opportunity to expand the size and diversity of the National Wilderness Preservation System would be foregone if none of the WSA's were designated (p. 111). But earlier you have also indicated that if the 167,480 acres in the Charles M. Russell Wildlife Refuge are designated then the addition of BLM WSA's would not be necessary to balance ecotype diversity (p. 81). These have been endorsed by the President and will probably be designated. There are already several million acres of wilderness in this region.

J A majority of the WSA's proposed for designation in the Missouri Breaks have a very large percentage of access to them controlled by surrounding private landowners (p. 74). Recreational use of these areas could

7 (p. 8)

J be restricted by the landowners and management of these areas for their intended purpose would no doubt be difficult, if not impossible. This situation involving access should be given more consideration than it apparently has been given, since four of the five areas proposed for designation involve very high levels of access control by surrounding landowners.

In spite of the length of these comments, you have done a pretty comprehensive job of assessing the suitability and associated impacts of designating the WSA's as wilderness. An attempt needs to be made to establish a more objective way to compare and assess the mineral potential of the WSA's. Considering the many improvements and activities which are allowed in designated wilderness areas, the wilderness designation does not really seem to be worth the trouble. Multiple use management applied to all the subject WSA's would be a more beneficial use of these public lands.

Sincerely,

Eldon L. Allison, Jr.

8

6/24/82

Dear Mr. Freeman,

A

I'm writing to urge your support of all aspects of the Conservationist's Alternative to the Montana Prairie Wilderness, along the Missouri Breaks, C.M Russell Refuge, and the Terry Badlands. Regretably, The Woodhawk Unit has not been recommended by BLM at this time as well.

My reason for supporting the full 209,700 acre area, as is recommended by the Conservationists is that I have seen piecemeal wilderness areas before, particularly in the timber-harvest-scarred mountains of Washington St & there might as well not be a wilderness. Gas rigs & overgrazed ranges are hardly an aesthetic alternative. Thank you for your consideration.

Dennis M. Dumas.

9(p.1)

Regina, Montana
June 24-82

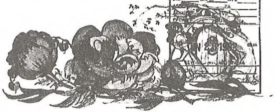
Dear Office Staff!

We didn't get to the meeting in Malta the 22nd, due to illness so will write my comments.

A

As far as Wilderness I am not against that but I strictly am against any more & against the closing of Mickus Bottom & U.L. Bend North of the Missouri River, those are two places that don't even classify as Wilderness and two of our very best fishing spots.

Our life has never been the same since these were closed for vehicle travel & there are lots of others



DM RM OPR
PA
BLM

9(p.2)

- 2 -

that could say the same. Just why can't these two places be opened & a road bladed & a couple culverts put in on the bad crosses? it would make a beautiful scenic route, nice place for recreation & the best fishing & boating spot there is.

If you would even open this for Senior Citizens, you know when we older folks get crippled up (as we both are) we can't walk miles to go fishing.

Please try to do something for this summers fishing.

We Thank you kindly. yours truly,
Mr & Mrs
Martin
Sandvick

10

1115 S. Grand
Bozeman, Mt. 59715
June 24, 1982

Glenn Freeman
District Manager
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

Dear Glenn,

A Please add land to the Missouri Breaks Wilderness as suggested by the Missouri Breaks Protective Association which would be for 209,700 acres; I'm sure you are familiar with the details.

B Also, please work on land exchanges between the BLM and state and private inholders: Cow Creek and Chimney Bend.

It's also essential to protect these lands until Congress can act favorably upon them.

Thank you.

Yours truly,
Mary
Mary Vant Hull

cc: Sen. Max Baucus
Sen. John Melcher
Rep. Pat Williams
Rep. Ron Marlenee

DM ___ RM ___ OPR ___
ASSOC.DM ___ PA ___
ADMIN ___ RVR ___
P/RA ___ JUD ___
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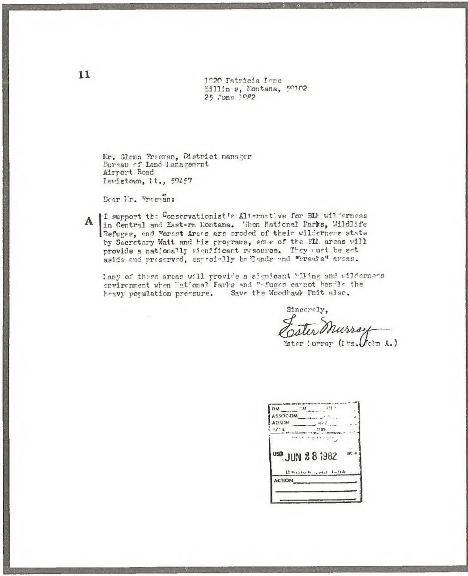
LEWISTOWN, MONTANA
ACTION



11

1820 Patricia Lane
Billings, Montana, 59102
25 June 1982

Mr. Glenn Freeman, District manager
Bureau of Land Management
Airport Road
Lewistown, Mt., 59457

Dear Mr. Freeman:

A I support the Conservationist's Alternative for BLM wilderness in Central and Eastern Montana. When National Parks, Wildlife Refuges, and Forest Areas are eroded of their wilderness state by Secretary Watt and his programs, some of the BLM areas will provide a nationally significant resource. They must be set aside and preserved, especially badlands and "breaks" areas.

Many of these areas will provide a signicant hiking and wilderness environment when National Parks and Refuges cannot handle the heavy population pressure. Save the Woodhawk Unit also.

Sincerely,

Ester Murray

Ester Murray (Mrs. John A.)

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ASSOC-DM____ PA____
ADMIN____ BVR____
W/EA____ JUD____
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LEWISTOWN, MONTANA
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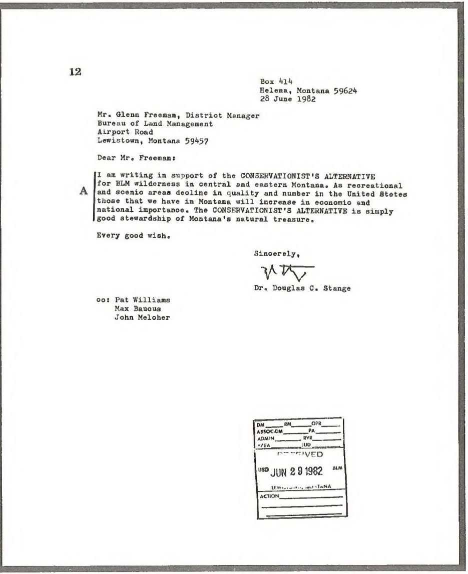

12

Box 414
Helena, Montana 59624
28 June 1982

Mr. Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Freeman:

A I am writing in support of the CONSERVATIONIST'S ALTERNATIVE for BLM wilderness in central and eastern Montana. As recreational and scenic areas decline in quality and number in the United States those that we have in Montana will increase in economic and national importance. The CONSERVATIONIST'S ALTERNATIVE is simply good stewardship of Montana's natural treasure.

Every good wish.

Sincerely,

Dr. Douglas C. Stange

cc: Pat Williams
Max Baucus
John Melcher

DM____ RM____ OPR____
ASSOC-DM____ PA____
ADMIN____ BVR____
W/EA____ JUD____
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LEWISTOWN, MONTANA
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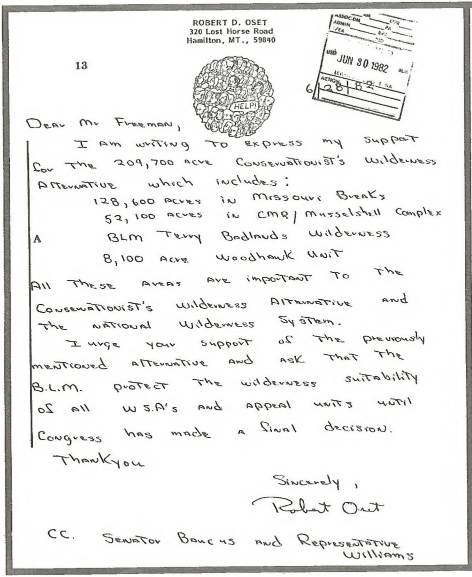


ROBERT D. OSET
320 Lost Horse Road
Hamilton, MT., 59840

13

ASSOC-DM
ADMIN
P/EA
USD JUN 30 1982 BLM
ACTION 6/28/82

Dear Mr Freeman,

I am writing to express my support for the 209,700 acre Conservationist's Wilderness Alternative which includes:

128,600 acres in Missouri Breaks
52,100 acres in CMR/Musselshell Complex
A BLM Terry Badlands Wilderness
8,100 acre Woodhawk Unit

All these areas are important to the Conservationist's Wilderness Alternative and the national Wilderness System.

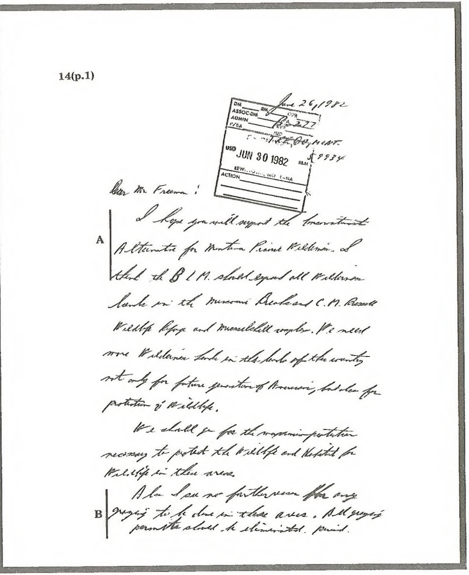
I urge your support of the previously mentioned alternative and ask that the B.L.M. protect the wilderness suitability of all W.S.A's and appeal units until Congress has made a final decision.

Thank you

Sincerely,

Robert Oset

CC. Senator Baucus and Representative Williams



14(p.1)

June 26, 1982

DM
ASSOC-DM
ADMIN
P/EA
USD JUN 30 1982 BLM
ACTION

Dear Mr. Freeman:

A I hope you will support the Conservationists Alternative for Montana Prairie Wilderness. I think the B L M. should expand all Wilderness lands in the Missouri Breaks and C.M. Russell Wildlife Refuge and Musselshell complex. We need more Wilderness lands in this lands of the country not only for future generations of Americans, but also for protection of Wildlife.

We should go for the maximum protection necessary to protect the Wildlife and Habitat for Wildlife in these areas.

B Also I see no further reason ~~for~~ any grazing to be done in these areas. All grazing permits should be eliminated. period.

14(p.2)

Further I think the B.L.M should concern itself with the protection of Flora and Fauna all over the U.S. and we can start right here in Montana.

Thank you

Very Sincerely,

Jerry L. Schaub

(SCHAUB)

15

Regina, Montana
June 23, 1982

DM
AM
ASSOC-DM
OPR
ADMIN
PA
P/EA
RVR
JUD
RECEIVED
JUL 01 1982
BLM
LEWISTOWN, MONTANA
ACTION

TO WHOM IT MAY CONCERN:

I am thoroughly opposed to more land being designated as Wilderness areas. As it is there is too much land under Federal jurisdiction which relies on the little taxpayer for support and maintenance.

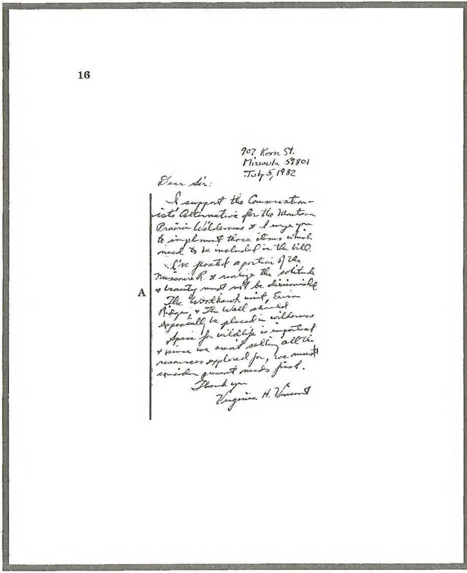
The land in South and Southeast Phillips Co. has many potentials and should be left to the Farmer and Rancher for multiple use.

Our National Parks and Historical Monuments, federally funded, are most beautiful to say the
A least, but did you ever try to eat one? Take heed, America--when the Farmer and Rancher "goes down" who will produce the Food and Fibers? Some have said "I'll get it at the Supermarkets". Ironically enough, Our Supermarkets are already overstuffed with cookies baked in Japan.

We Farmers and Ranchers who are trying to make a decent living are hindered by the concepts of this sort of "gaff" and whatever more I could say has been said over and over again. Back Packin' has been the story of my life so I say "forget about this wilderness area and solitude for the prairie dog" and let's get America, our God given Heritage, back on her two feet again.

Sincerely yours,

Mrs. John (Rose) Matovich
Mrs John (Rose) Matovich



16

907 Kern St.
Missoula 59801
July 5, 1982

Dear Sir:

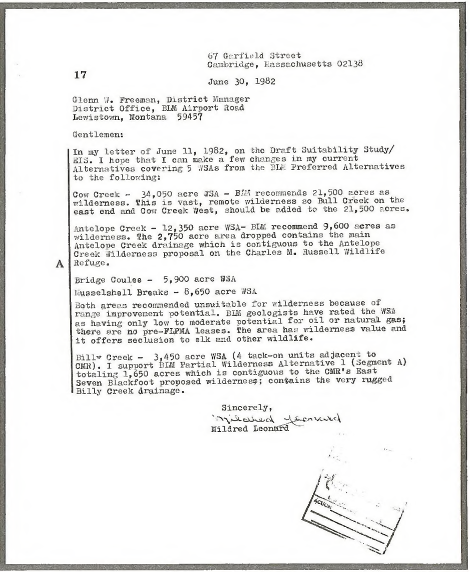
A I support the Conservationists' Alternative for the Montana Prairie Wilderness & I urge you to implement those items which need to be included in the bill.

I've floated a portion of the Missouri R. & realize the solitude & beauty must not be diminished.

The Woodhawk unit, Erwin Ridge, & The Wall should especially be placed in wilderness.

Space for wildlife is important & since we aren't selling all the resources explored for, we must consider present needs first.

Thank you
Virginia H. Vincent



17

67 Garfield Street
Cambridge, Massachusetts 02138

June 30, 1982

Glenn W. Freeman, District Manager
District Office, BLM Airport Road
Lewistown, Montana 59457

Gentlemen:

A In my letter of June 11, 1982, on the Draft Suitability Study/EIS. I hope that I can make a few changes in my current Alternatives covering 5 WSAs from the BLM Preferred Alternatives to the following:

Cow Creek - 34,050 acre WSA - BLM recommends 21,500 acres as wilderness. This is vast, remote wilderness so Bull Creek on the east end and Cow Creek West, should be added to the 21,500 acres.

Antelope Creek - 12,350 acre WSA- BLM recommend 9,600 acres as wilderness. The 2,750 acre area dropped contains the main Antelope Creek drainage which is contiguous to the Antelope Creek Wilderness proposal on the Charles M. Russell Wildlife Refuge.

Bridge Coulee - 5,900 acre WSA

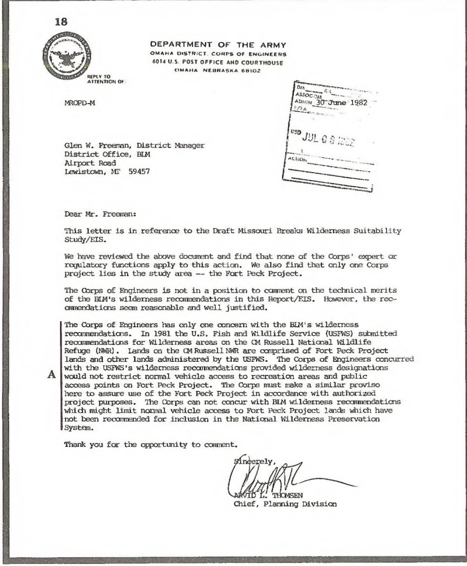
Musselshell Breaks - 8,650 acre WSA

Both areas recommended unsuitable for wilderness because of range improvement potential. BLM geologists have rated the WSA as having only low to moderate potential for oil or natural gas; there are no pre-FLPMA leases. The area has wilderness value and it offers seclusion to elk and other wildlife.

Billy Creek - 3,450 acre WSA (4 tack-on units adjacent to CMR). I support BLM Partial Wilderness Alternative 1 (Segment A) totaling 1,650 acres which is contiguous to the CMR's East Seven Blackfoot proposed wilderness; contains the very rugged Billy Creek drainage.

Sincerely,
Mildred Leonard
Mildred Leonard

ACTION



18

DEPARTMENT OF THE ARMY
OMAHA DISTRICT, CORPS OF ENGINEERS
6014 U.S. POST OFFICE AND COURTHOUSE
OMAHA NEBRASKA 68102

REPLY TO
ATTENTION OF:

MROPD-M

30 June 1982

USD JUL 0 8 1982

ACTION

Glen W. Freeman, District Manager
District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

This letter is in reference to the Draft Missouri Breaks Wilderness Suitability Study/EIS.

We have reviewed the above document and find that none of the Corps' expert or regulatory functions apply to this action. We also find that only one Corps project lies in the study area -- the Fort Peck Project.

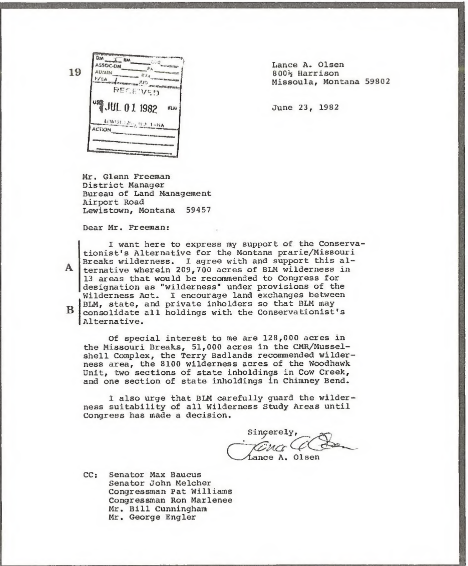
The Corps of Engineers is not in a position to comment on the technical merits of the BLM's wilderness recommendations in this Report/EIS. However, the recommendations seem reasonable and well justified.

A The Corps of Engineers has only one concern with the BLM's wilderness recommendations. In 1981 the U.S. Fish and Wildlife Service (USFWS) submitted recommendations for Wilderness areas on the CM Russell National Wildlife Refuge (NWR). Lands on the CM Russell NWR are comprised of Fort Peck Project lands and other lands administered by the USFWS. The Corps of Engineers concurred with the USFWS's wilderness recommendations provided wilderness designations would not restrict normal vehicle access to recreation areas and public access points on Fort Peck Project. The Corps must make a similar proviso here to assure use of the Fort Peck Project in accordance with authorized project purposes. The Corps can not concur with BLM wilderness recommendations which might limit normal vehicle access to Fort Peck Project lands which have not been recommended for inclusion in the National Wilderness Preservation System.

Thank you for the opportunity to comment.

Sincerely,

ARVID L. THOMSEN
Chief, Planning Division



19

DM RM
ASSOC-DM PA
ADMIN
P/EA
RECEIVED
USD JUL 01 1982 BLM
LEWISTOWN, MONTANA
ACTION

Lance A. Olsen
800½ Harrison
Missoula, Montana 59802

June 23, 1982

Mr. Glenn Freeman
District Manager
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Freeman:

A I want here to express my support of the Conservationist's Alternative for the Montana prarie/Missouri Breaks wilderness. I agree with and support this alternative wherein 209,700 acres of BLM wilderness in 13 areas that would be recommended to Congress for designation as "wilderness" under provisions of the Wilderness Act. I encourage land exchanges between
B BLM, state, and private inholders so that BLM may consolidate all holdings with the Conservationist's Alternative.

Of special interest to me are 128,000 acres in the Missouri Breaks, 51,000 acres in the CMR/Musselshell Complex, the Terry Badlands recommended wilderness area, the 8100 wilderness acres of the Woodhawk Unit, two sections of state inholdings in Cow Creek, and one section of state inholdings in Chimney Bend.

I also urge that BLM carefully guard the wilderness suitability of all Wilderness Study Areas until Congress has made a decision.

Sincerely,

Lance A. Olsen

CC: Senator Max Baucus
Senator John Melcher
Congressman Pat Williams
Congressman Ron Marlenee
Mr. Bill Cunningham
Mr. George Engler

20

Helena, Montana
July 5th. 1982

Mr. Glenn W. Freeman,
District Manager, B.L.M.,
Lewistown, Montana

Dear Mr. Freeman:

I wish to present the following comments for the Missouri Breaks and Terry Badlands Wilderness Proposals.

I would like to see Wilderness designation for all the 12 wilderness study areas but will settle for your recommended seven areas of 79,770 acres.

I feel that Eastern Montana has been badly treated when it comes to Wilderness. Having had limited experience in the area seeking places for enjoyment of the wilds, I feel that this shortage of wilderness should be corrected.

Attending the formal hearing held in Helena on June 24th. 1982, I fould that opposition to your wilderness proposals was pretty much limited to persons with grazing intereets.

This group of people had first choice to all the land in Eastern Montana and have had that privilege for 120 years. I do not feel they should be forever guaranteed almost free grazing on public lands forever.

Please register my approval of your recommendation of 79,770 acres for full wilderness designation.

I also wish to compliment you and your fellow workers on the fine and complete document, Missouri Breaks Wilderness Suitability Study/EIS. I thoroughly enjoyed the pencil illustrations of Ann Patterson Bishop.

Very truly yours,

HB Gloege

H. B. Gloege
4621 Hwy 12 W.
Helena, MT 59601

Ph. 442-8538

DM RM OPR
ASSOC-DM PA
ADMIN RVR
P/EA JUD
USDI JUL 07 1982 BLM
ACTION

21

DM RM
ASSOC-DM
ADMIN
P/EA

July 2, 1982

Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

Dear Mr. Freeman,

As you know, the B.L.M. recently released a draft study on the wilderness study areas in central and eastern Montana. I find the 79,770 acre wilderness recommendation unsatisfactory. The 309,700 acre Conservationists Alternative does far more to protect the total wilderness resource, and provides adequate acreage for restoration and perpetuation of deer, elk, and bighorn sheep populations. **A**

As a hunter, I have seen the beauty and diversity of several wild areas in the Missouri Breaks. The Bullwacker, Cow Creek, Antelope Creek, Ervin Ridge, and Woodhawk areas are all worthy of protection in their entirety. The Woodhawk unit has good public access for hunters and recreationists, and is an integral part of the block of wilderness study areas near Cow Island.

B I would also like to express my support for land exchanges between the B.L.M. and state and private inholders to allow consolidation of B.L.M. holdings within all Conservationists Alternative areas, specifically the two state sections in Cow Creek and one state section in Chimney Bend. As a Forest Service employee on the Flathead National Forest, I have seen land exchanges between Forest Service and private interests carried out for management purposes.

Finally I would like to reiterate that I support the 309,700 acre Conservationists Wilderness Alternative, including 128,600 acres in the Missouri Breaks, 52,100 acres in the CMR/Musselshell Complex, and the B.L.M. recommended Terry Badlands Wilderness. I also respectfully request that the wilderness suitability of all W.S.A.'s and appeal units be monitored and protected until Congress has made a final wilderness decision.

Please include this letter in the public hearing record.

Thank You,
Sincerely,

Calvin R. Sibley
Calvin R. Sibley
850 Lost Creek Dr.
Kalispell, Mt. 59901

CC: Senator Max Baucus
Senator John Melcher
Representative Pat Williams
Representative Ron Marlenee

22

DM ___ RM ___ UPR ___
ASSOC.DM ___ PA ___
ADMIN ___ RVR ___
P/EA ___ JUD ___
RECEIVED
USD JUL 09 1982 BLM
ACTION ___

Mr. Glenn Freeman
Dist. Mngr. BLM

Dear Mr. Freeman,

Last September some friends and I kayaked all the way from home to Hell Creek on Fort Peck Reservoir. It was my first in depth visit to that marvelous wilderness along the Missouri.

A I would like to voice my support for the "Conservationists Alternative" when you consider wilderness recommendations in BLM eastern Montana lands. (During our trip we hiked up into many of the proposed areas, including Ervin Ridge, Cow Ck, Antelope Ck, and Woodhawk.) These areas and the others offer the best pieces of true wilderness we have left in this part of the country. We should preserve as much as possible.

Until something is officially done I urge you to protect the wilderness characteristics of all the areas in question, until Congress decides their fate.

B Please work to consolidate BLM ownership in all these areas through land exchanges with state and private inholders.

Keep me informed of your decisions.

Thank You
Tom R Sewell.

Tom R Sewell
Box 5494
Missoula
59807

23

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80295

JUL 1 1982

Ref: 8MO

DM ___ ASSOC DM ___ ADMIN ___
USD JUL 12 1982 BLM
ACTION ___

Mr. Glen W. Freeman
District Manager
District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

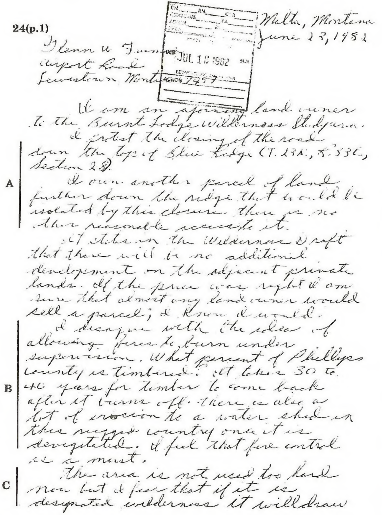
Thank you for the opportunity to review your agency's draft environmental impact statement for the Missouri Breaks Wilderness Suitability Study. The EIS appears to be a thorough analysis of the various issues involved in the land use proposal and is clearly written.

We appreciate your recommendations for resource protection and for adding the proposed ecotypes to the wilderness system. We strongly support your efforts and management plans for protecting these fragile Missouri Breaks lands from accelerated erosion. We believe these later efforts to be most important for both wilderness and non-wilderness lands under your jurisdiction.

According to EPA's rating system for draft impact statments this EIS is rated LO-1 (lack of objections-sufficient information). If you have any questions please contact Mr. Gene Taylor in our Montana Office at FTS 585-5486 (comm. 449-5486).

Sincerely yours,

Seth C. Hunt
for Steven J. Durham
Regional Administrator



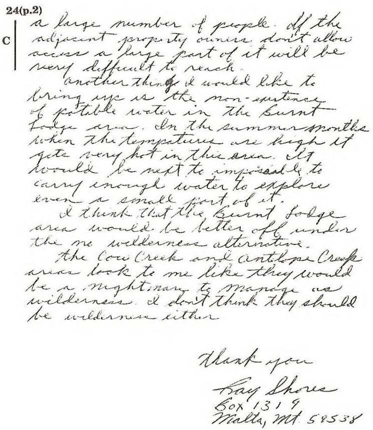
24(p.1)

DM ___ RA ___ CR ___
ADM OP SUPV ___ PA ___
ADMIN ___ EL ___
JUL 19 1982
LEWISTOWN DISTRICT, MONTANA
ACTION 7457

Malta, Montana
June 23, 1982

Glenn W. Freeman
Airport Road
Lewistown, Montana

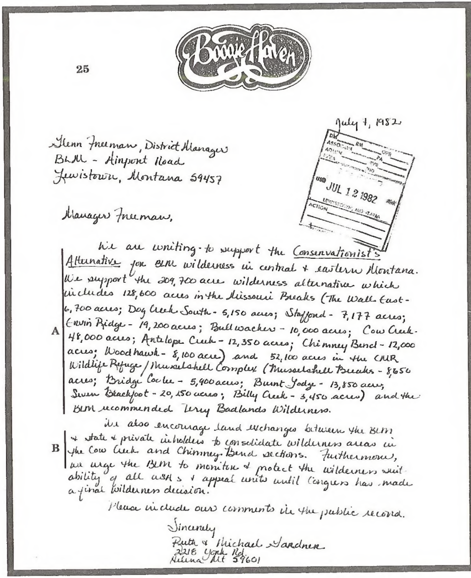
I am an ajoining land owner
to the Burnt Lodge Wilderness Study area.
I protest the closing of the road
down the top of Blue Ridge (T. 23N., R. 33E.,
Section 28).
A I own another parcel of land
further down the ridge that would be
isolated by this closure. there is no
other reasonable access to it.
It states in the Wilderness Draft
that there will be no additional
developement on the adjacent private
lands. If the price was right I am
sure that almost any land owner would
sell a parcel; I know I would.
I disagree with the idea of
allowing fires to burn under
supervision. What percent of Phillips
county is timbered? It takes 30 to
B 40 years for timber to come back
after it burns off. there is also a
lot of erosion to a water shed in
this rugged country once it is
devegitated. I feel that fire control
is a must.
The area is not used too hard
C now but I fear that if it is
designated wilderness it will draw



24(p.2)

a large number of people. If the
C adjacent property owners don't allow
access a large part of it will be
very difficult to reach.
another thing I would like to
bring up is the non-existence
of potable water in the Burnt
Lodge area. In the summer months
when the tempatures are high it
gets very hot in this area. It
would be next to impossable to
carry enough water to explore
even a small part of it.
I think that the Burnt Lodge
area would be better off under
the no wilderness alternative.
The Cow Creek and Antelope Creek
areas look to me like they would
be a nightmare to manage as
wilderness. I don't think they should
be wilderness either

Thank you
Ray Shores
Box 1319
Malta, Mt. 59538



Boogie Haven

25

July 7, 1982

DM
ASSOC RM OPR
ADMIN PA
PVR
USO JUL 12 1982
LEWISTOWN, MONTANA
ACTION

Glenn Freeman, District Manager
BLM - Airport Road
Lewistown, Montana 59457

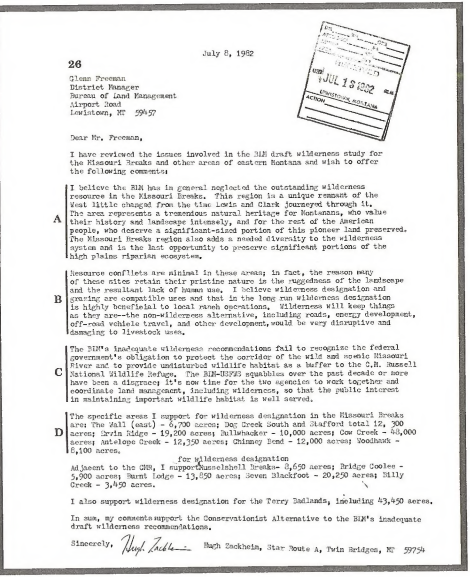
Manager Freeman,

A We are writing to support the Conservationist's Alternative for BLM wilderness in central & eastern Montana. We support the 209,700 acre wilderness alternative which includes 128,600 acres in the Missouri Breaks (The Wall East - 6,700 acres; Dog Creek South - 5,150 acres; Stafford - 7,177 acres; Ervin Ridge - 19,200 acres; Bullwacker - 10,000 acres; Cow Creek - 48,000 acres; Antelope Creek - 12,350 acres; Chimney Bend - 12,000 acres; Woodhawk - 8,100 acre) and 52,100 acres in the CMR Wildlife Refuge / Musselshell Complex (Musselshell Breaks - 8,650 acres; Bridge Coulee - 5,900 acres; Burnt Lodge - 13,850 acres; Seven Blackfoot - 20,150 acres; Billy Creek - 3,450 acres) and the BLM recommended Terry Badlands Wilderness.

B We also encourage land exchanges between the BLM & state & private inholders to consolidate wilderness areas in the Cow Creek and Chimney Bend sections. Furthermore, we urge the BLM to monitor & protect the wilderness suitability of all WSA's & appeal units until Congress has made a final wilderness decision.

Please include our comments in the public record.

Sincerely
Ruth & Michael Gardner
2218 York Rd.
Helena MT 59601



26

July 8, 1982

DM
ASSOC RM OPR
PA
USO JUL 13 1982 RECEIVED
LEWISTOWN, MONTANA
ACTION

Glenn Freeman
District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman,

I have reviewed the issues involved in the BLM draft wilderness study for the Missouri Breaks and other areas of eastern Montana and wish to offer the following comments:

A I believe the BLM has in general neglected the outstanding wilderness resource in the Missouri Breaks. This region is a unique remnant of the West little changed from the time Lewis and Clark journeyed through it. The area represents a tremendous natural heritage for Montanans, who value their history and landscape intensely, and for the rest of the American people, who deserve a significant-sized portion of this pioneer land preserved. The Missouri Breaks region also adds a needed diversity to the wilderness system and is the last opportunity to preserve significant portions of the high plains riparian ecosystem.

B Resource conflicts are minimal in these areas; in fact, the reason many of these sites retain their pristine nature is the ruggedness of the landscape and the resultant lack of human use. I believe wilderness designation and grazing are compatible uses and that in the long run wilderness designation is highly beneficial to local ranch operations. Wilderness will keep things as they are--the non-wilderness alternative, including roads, energy development, off-road vehicle travel, and other development, would be very disruptive and damaging to livestock uses.

C The BLM's inadequate wilderness recommendations fail to recognize the federal government's obligation to protect the corridor of the wild and scenic Missouri River and to provide undisturbed wildlife habitat as a buffer to the C.M. Russell National Wildlife Refuge. The BLM-USFWS squabbles over the past decade or more have been a disgrace; it's now time for the two agencies to work together and coordinate land management, including wilderness, so that the public interest in maintaining important wildlife habitat is well served.

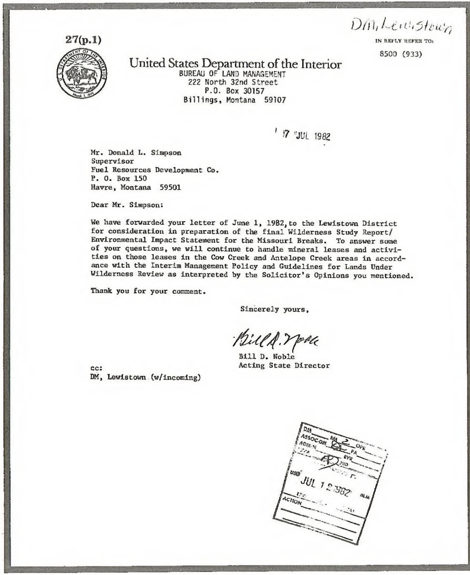
D The specific areas I support for wilderness designation in the Missouri Breaks are: The Wall (east) - 6,700 acres; Dog Creek South and Stafford total 12, 300 acres; Ervin Ridge - 19,200 acres; Bullwhacker - 10,000 acres; Cow Creek - 48,000 acres; Antelope Creek - 12,350 acres; Chimney Bend - 12,000 acres; Woodhawk - 8,100 acres.

Adjacent to the CMR, I support for wilderness designation Musselshell Breaks- 8,650 acres; Bridge Coolee - 5,900 acres; Burnt Lodge - 13,850 acres; Seven Blackfoot - 20,250 acres; Billy Creek - 3,450 acres.

I also support wilderness designation for the Terry Badlands, including 43,450 acres.

In sum, my comments support the Conservationist Alternative to the BLM's inadequate draft wilderness recommendations.

Sincerely, Hugh Zackheim Hugh Zackheim, Star Route A, Twin Bridges, MT 59754



DM, Lewistown

27(p.1)

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
222 North 32nd Street
P.O. Box 30157
Billings, Montana 59107

IN REPLY REFER TO:
8500 (933)

17 JUL 1982

Mr. Donald L. Simpson
Supervisor
Fuel Resources Development Co.
P. O. Box 150
Havre, Montana 59501

Dear Mr. Simpson:

We have forwarded your letter of June 1, 1982, to the Lewistown District for consideration in preparation of the final Wilderness Study Report/ Environmental Impact Statement for the Missouri Breaks. To answer some of your questions, we will continue to handle mineral leases and activities on those leases in the Cow Creek and Antelope Creek areas in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review as interpreted by the Solicitor's Opinions you mentioned.

Thank you for your comment.

Sincerely yours,

Bill D. Noble
Bill D. Noble
Acting State Director

cc:
DM, Lewistown (w/incoming)

DM
ASSOC-DM
ADMIN
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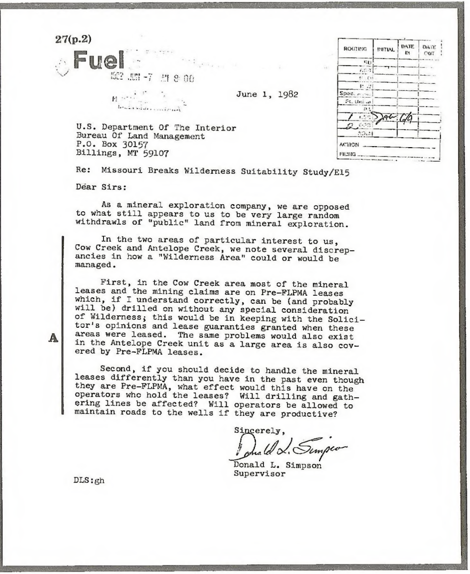
PA
USO
JUL 12 1982
BLM
ACTION



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ACTION
FILING

June 1, 1982

U.S. Department Of The Interior
Bureau Of Land Management
P.O. Box 30157
Billings, MT 59107

Re: Missouri Breaks Wilderness Suitability Study/E15

Dear Sirs:

As a mineral exploration company, we are opposed to what still appears to us to be very large random withdrawls of "public" land from mineral exploration.

A

In the two areas of particular interest to us, Cow Creek and Antelope Creek, we note several discrepancies in how a "Wilderness Area" could or would be managed.

First, in the Cow Creek area most of the mineral leases and the mining claims are on Pre-FLPMA leases which, if I understand correctly, can be (and probably will be) drilled on without any special consideration of Wilderness; this would be in keeping with the Solicitor's opinions and lease guaranties granted when these areas were leased. The same problems would also exist in the Antelope Creek unit as a large area is also covered by Pre-FLPMA leases.

Second, if you should decide to handle the mineral leases differently than you have in the past even though they are Pre-FLPMA, what effect would this have on the operators who hold the leases? Will drilling and gathering lines be affected? Will operators be allowed to maintain roads to the wells if they are productive?

Sincerely,

Donald L. Simpson
Donald L. Simpson
Supervisor

DLS:gh

28

July 10, 1982
P.O. Box 659
Dubois, WY. 82513

DM___ RM___ OPR___
ASSOC-DM___ PA___
ADMIN___ RVR___
P/EA___ JUD___
RECEIVED
USD JUL 14 1982 BLM
LEWISTOWN, MONTANA
ACTION___

Glenn Freeman, District Manager
Bureau of Land Management
Airport Rd.
Lewistown, MT 59457

Dear Mr Freeman:

I am concerned that the BLM has recommended only 79,770 acres for a Montana Prairie Wilderness in an area rich in wildlife potential. Inclusion of the areas recommended by conservationists will prevent further encroachment on island bighorn sheep habitat and allow restoration of other species to the Missouri River Breaks region.

A I urge you to recommend a 200,000-acre Montana Prairie Wilderness; and I want to emphasize the importance of the Woodhawk unit as an integral part of the wilderness.

Sincerely,
Duane L. Horn

Noranda Exploration, Inc.
2436 West Central Avenue
Missoula, Montana 59801

noranda

Tel.: (406) 728-0950

29

DM___ RM___ OPR___
ASSOC-DM___ PA___
ADMIN___ RVR___
P/EA___ JUD___
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USD JUL 15 1982 BLM
LEWISTOWN, MONTANA
ACTION___

July 13, 1982

Glenn W. Freeman, District Manager
Lewistown District Office, B.L.M.
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

I offer the following comments on the Missouri Breaks Wilderness Suitability Study Draft E.I.S. for your consideration.

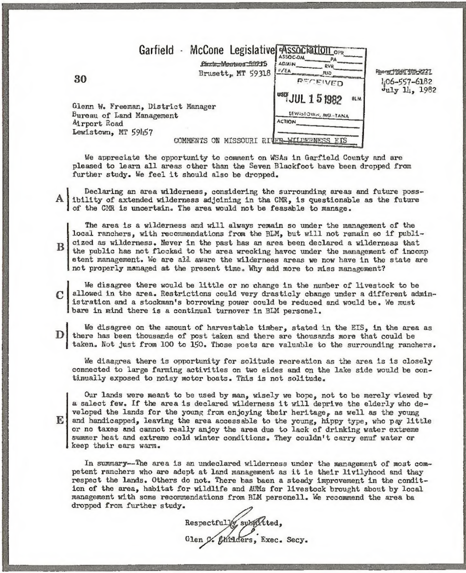
A I agree with your no wilderness alternative preference for 7 of the WSA's and reduction of area on 4 additional WSA's. There is some concern about the WSA's with wilderness preference that have pre-FLPMA leaseholders. Should these leases be developed, it is conceivable that the desired wilderness characteristics could be lost. If this happens, the area would no longer meet the objectives of this study but would still be classed as wilderness, thereby restricting further development. For this reason, I propose that a decision on wilderness designation for these areas be postponed until after the pre-FLPMA leases expire. At that time, should the areas still retain their wilderness character, they could be considered for wilderness designation.

B To determine loss of revenue (economic impact) range leases are considered, but loss of potential revenue from gas and coal leasing is not mentioned. Was this considered in your decision-making process?

Furthermore, I would like to commend your office on the thorough job of researching existing mineral claims and leases, and evaluating the potential resources of the areas in question. It is rare to read an E.I.S. from the B.L.M. or U.S.F.S. in which mineral potential is so rigorously evaluated. I hope this becomes a standard for public land management agencies.

Sincerely,
Paul E. Fredericks
Paul E. Fredericks
Geologist

dls



30

Garfield · McCone Legislative Association

~~Circle, Montana 59215~~
Brusett, MT 59318

~~Phone (406) 485-2227~~
406-557-6182
July 14, 1982

DM ___ OPR ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
P/EA ___ JUD ___
RECEIVED
USDI JUL 15 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

Glenn W. Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457

COMMENTS ON MISSOURI RIVER WILDERNESS EIS

We appreciate the opportunity to comment on WSAs in Garfield County and are pleased to learn all areas other than the Seven Blackfoot bave been dropped from further study. We feel it should also be dropped.

A | Declaring an area wilderness, considering the surrounding areas and future possibility of extended wilderness adjoining in tha CMR, is questionable as the future of the CMR is uncertain. The area would not be feasable to manage.

B | The area is a wilderness and will always remain so under the management of the local ranchers, with recommendations from the BLM, but will not remain so if publicized as wilderness. Never in the past has an area been declared a wilderness that the public has not flockad to the area wrecking havoc under the management of incomp etent management. We are ald aware the wildernees areas we now have in the state are not properly managed at the present time. Why add more to miss management?

C | We disagree there would be little or no change in the number of livestock to be allowed in the area. Restrictions could very drasticly cbange under a different administration and a stockman's borrowing power could be reduced and would be. We must bare in mind there is a continual turnover in BLM personel.

D | We disagree on the amount of harvestable timber, stated in the EIS, in the area as there has been thousande of post taken and there are thousands more that could be taken. Not just from 100 to 150. Those poets are valuable to the surrounding ranchers.

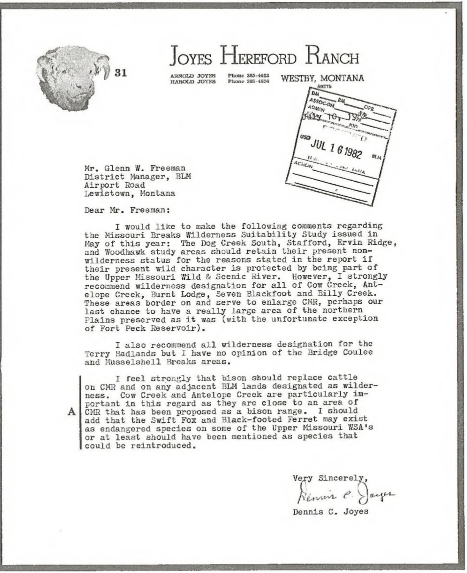
We diagrea there is opportunity for solitude recreation as the area is is closely connected to large farming activities on two eides and on the lake side would be continually exposed to noisy motor boats. This is not solitude.

E | Our lands were meant to be used by man, wisely we bope, not to be merely viewed by a select few. If the area is declared wilderness it will deprive the elderly who developed the lands for the young from enjoying their heritage, as well as the young and handicapped, leaving the area accessable to the young, hippy type, who pay little or no taxes and cannot really anjoy the area due to lack of drinking water extreme summer heat and extreme cold winter conditions. They couldn't carry enuf water or keep their ears warm.

In summary--The area is an undeclared wilderness under the management of most competent ranchers who are adept at land management as it ie their livilyhood and thay respect the lands. Others do not. There bas baen a steady improvement in the condition of the area, habitat for wildlife and AUMs for livestock brought about by local management with some recommendations from BLM personell. We recommend the area ba dropped from further study.

Respectfully submitted,

Glen C. Childers, Exec. Secy.



31

JOYES HEREFORD RANCH

ARNOLD JOYES Phone 385-4613
HAROLD JOYES Phone 385-4616
WESTBY, MONTANA
59275

July 10, 1982

DM ___ RM ___
ASSOC-DM ___ OPR ___
ADMIN ___ PA ___
P/EA ___ JUD ___
RECEIVED
USDI JUL 16 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

Mr. Glenn W. Freeman
District Manager, BLM
Airport Road
Lewistown, Montana

Dear Mr. Freeman:

I would like to make the following comments regarding the Missouri Breaks Wilderness Suitability Study issued in May of this year: The Dog Creek South, Stafford, Ervin Ridge, and Woodhawk study areas should retain their present non-wilderness status for the reasons stated in the report if their present wild character is protected by being part of the Upper Missouri Wild & Scenic River. However, I strongly recommend wilderness designation for all of Cow Creek, Antelope Creek, Burnt Lodge, Seven Blackfoot and Billy Creek. These areas border on and serve to enlarge CMR, perhaps our last chance to have a really large area of the northern Plains preserved as it was (with the unfortunate exception of Fort Peck Reservoir).

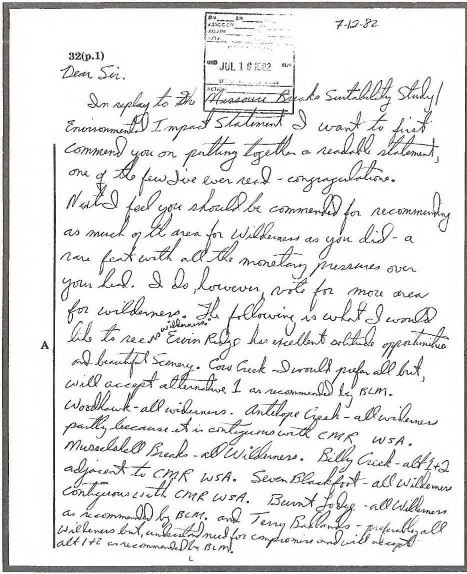
I also recommend all wilderness designation for the Terry Badlands but I have no opinion of the Bridge Coulee and Musselshell Breaks areas.

A | I feel strongly that bison should replace cattle on CMR and on any adjacent BLM lands designated as wilderness. Cow Creek and Antelope Creek are particularly important in this regard as they are close to an area of CMR that has been proposed as a bison range. I should add that the Swift Fox and Black-footed Ferret may exist as endangered species on some of the Upper Missouri WSA's or at least should have been mentioned as species that could be reintroduced.

Very Sincerely,

Dennis C. Joyes

Dennis C. Joyes



32(p.1)

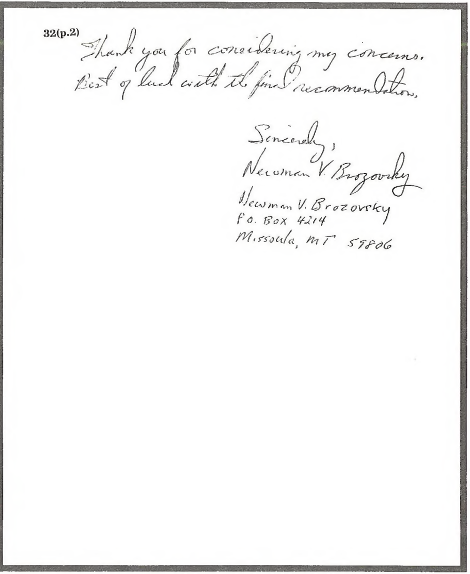
DM
ASSOC DM
ADMIN
USD JUL 16 1982 BLM
ACTION

7-12-82

Dear Sir:

In replay to the Missouri Breaks Suitability Study/Environmental Impact Statement I want to first commend you on putting together a readable statement, one of the few I've ever read - congragulations. Next I feel you should be commended for recommending as much of the area for Wilderness as you did - a rare feat with all the monetary pressures over your head. I do, however, vote for more area for wilderness. The following is what I would like to see as wilderness: Ervin Ridge has excellent solitude opportunities and beautiful Scenery. Cow Creek - I would prefer all but, will accept alternative 1 as recommended by BLM. Woodhawk - all wilderness. Antelope Creek - all wilderness partly because it is contiguous with CMR WSA. Musselshell Breaks - all Wilderness. Billy Creek - alt 1+2 adjacent to CMR WSA. Seven Blackfoot - all Wilderness contiguous with CMR WSA. Burnt Lodge - all Wilderness as recommended by BLM. and Terry Badlands - preferably all Wilderness but, understand need for compromise and will accept alt 1+2 as recommended by BLM.

A



32(p.2)

Thank you for considering my concerns. Best of luck with the final recommendation.

Sincerely,
Newman V. Brozovsky

Newman V. Brozovsky
P.O. Box 4214
Missoula, MT 59806

33

Linda Comola
1220 Leslie Ave
Helena, MT 59601
442-9643

July 15, 1982

Glenn Freeman, District Manager
Bureau of Land Management
U.S. Dept. of Interior
Airport Rd
Lewistown, MT 59457

Dear Mr. Freeman:

I would like to state my views for the public record on the wilderness designations for the Missouri Breaks area in Northcentral Montana.

I have personally visited these areas several times in the last few years by canoe and by land and am deeply impressed by the peacefulness, the extent of the wildlife and the diversity of the terrain. Unfortunately,
A your draft study does not recommend enough of this unique and historical area for wilderness designation. Therefore, I basically support the "Conservationists' Alternative."

The above alternative has been given careful consideration by many people in Montana who would like to see their heritage retained and our beautiful country remain pristine and unspoiled for future generations to enjoy. I am sure private landowners can work out individual agreements with BLM so that consolidation can be worked on without hindering possible wilderness designation. It has been done in many other places.

A I would like to see the 209,700 acre Conservationist's Alternative adopted for the Missouri Breaks, Terry Badlands and the CMR/Musselshell complex as all these areas have wilderness suitability and should eventually be adopted for wilderness by Congress.

Thank you for considering my comments.

Sincerely,

Linda S Comola

Linda S. Comola

DM RM OPR
ASSOC DM
ADMIN PA
P/EA
USO JUL 16 1982 BLM
ACTION

34(p.1)

THE WILDERNESS SOCIETY
Northern Rockies Regional Office
107 West Lawrence, P. O. Box 1184, Helena, Montana 59601 (406)443-7350

DM
ADMIN
P/EA
USO JUL 16 1982 BLM
ACTION

July 14, 1982

Mike Penfold, State Director
Bureau of Land Management
222 N. 32nd
P.O. Box 30157
Billings, MT 59107

Dear Mike,

I'm very sorry that the "100-year" storm on the Missouri the evening of June 28 prevented us from making our rendevous at Judith Landing the evening of June 29. I know that you couldn't even make it to the landing because of the road washing out north of the River. As it turned out, we had to stop at Hole in the Wall the second night about ten miles upstream from Judith Landing because of a fierce east wind. The storm Monday night was incredible. We thought we were literally going to be washed down the Missouri. We had more than 8" of standing water under our tent. Needless to say, it was a matter of survival throughout the night. Of course, we can look back on the experience and laugh at it now that its over.

During our float we did take a look at The Wall which is part of the Conservationist's Alternative for a Missouri Breaks Wilderness Complex. I continue to believe that The Wall should be designated wilderness because of its complementarity with the Wild River and the desirability of achieving wilderness management for as much of the Missouri shoreline as possible.

We finally did reach the Judith about midday on Wednesday, June 30. We decided to discontinue the float due to the east wind and threatening weather. However, we substituted the folat with two days of hiking in the Cow Creek and Antelope Creek Wilderness Study Areas.

A On July 1 we hiked in the proposed Antelope Creek Wilderness adjacent to the Cow Island recreation road. We hiked into and I believe located the Kid Curry Hideaway Historic Monument. We also walked into the Antelope Creek WSA along the ridges overlooking Hideway Coulee. We also looked at that portion of Antelope Creek which has been excluded from the proposed Antelope Creek Wilderness. I can see no good reason for this exclusion. Antelope Creek itself should definitely be in any wilderness bearing its name. In addition, the Antelope Creek drainage possesses outstanding wilderness characteristics and is a logical extension of the wilderness resource in the adjacent C.M. Russell National Wildlife Refuge. I strongly recommend that the proposed Antelope Wilderness be upgraded to include the Antelope Creek (segment B) portion on the east side of the proposed wilderness.

B On July 2 we hiked extensively in the southeastern portion of the proposed Cow Creek Wilderness. We traveled along the Cow Island recreation road to an overlook where we could look into Bull Creek and up into Winter Creek. We then hiked into Bull Creek and up into the mouth of Winter Creek crossing over near the State School Section. This

"In wildness is the preservation of the world." - Thoreau

34(p.2)

Mike Penfold
July 14, 1982
page 2

B section should be exchanged in order to facilitate wilderness management of the area. We then dropped into Coyote Coulee which has been excluded from the proposed wilderness. Based on this trip I can see absolutely no reason to exclude Coyote Coulee from the
C proposed Cow Creek Wilderness. The state section south of the Shetland Divide Road as well as the state section near Horse Thief Canyon should both be exchanged to facilitate wilderness management of the Cow Creek WSA.

B Coyote Coulee possesses the same characteristics as the adjacent Winter Creek/Bull Creek area and is needed to provide for a more manageable and defensible wilderness boundary. I strongly recommend that the Cow Creek Wilderness proposal be expanded to include Coyote Coulee on the southeast side as well as the approximate 9,600 acre area on the western segment on the Cow Creek area which is currently under appeal by conservation groups before the IBLA.

Please consider this letter as supplemental comment to the statement which I submitted at the BLM public hearing in Helena on June 24. I ask that this letter be entered into the official record.

Thank you for your consideration of our concerns.

Sincerely,

Bill Cunningham

Bill Cunningham
Regional Representative

BC:dw

cc: Glenn Freeman
Governor Ted Schwinden
Senator John Melcher
Senator Max Baucus
Representative Ron Marlenee

35

Chinook, Montana
July 14, 1982

Glenn W. Freeman, District Mansger
Lewistown District
Airport Road
Lewistown
Montans 59457

Dear Mr. Freeman:

I was unable to attend either of the public hearings that were held in Malta and in Winifred in regard to expressing our opinion as to whether the Cow Creek tract and the Antelope tract should be classified as Wilderness.

I am not directly involved with these tracts as I do not have leases or run cattle in either tract. However, I am familiar with all the Missouri River Breaks area in Blaine County and Phillipa County as I have lived in south Bline County all my life.

From the beginning of the Wilderness study in the Missouri River Breaks I could never see why there should be a Wilderness study in the first place in this area. I am a firm believer in Multiple Use of public lands. The B.L.M. , Department of Interior, or Congress has set up certain guidelines
A as to what constitutes a Wilderness area. These two tracts, Cow CReek and Antelope, do not meet the criteria of being a Wilderness as they show the imprint of man as evidenced by trails, stock water pits, some short fences, and several abandoned drilling sites. If one wants solitude, one can find it in these breaks, but one can find better places to seek solitude on my ranch.

We know that some hunters hunt in this area in the fall. I am not sure what primitive type of recreation is, but I do not think it is carried out on these two tracts.

From the concept of multiple use, several ranchers who live in the area have public land leased from the B.L.M. . Lease money goes to the B.L.M. .

B According to the B.L.M. Suitability Study of May 1982, Page 62 and 64, in both Cow Creek and Antelope, the potential for finding natural gas is rated high. If so, there should be opportunity for additional exploration before putting either tract in a restricted Wilderness classification.

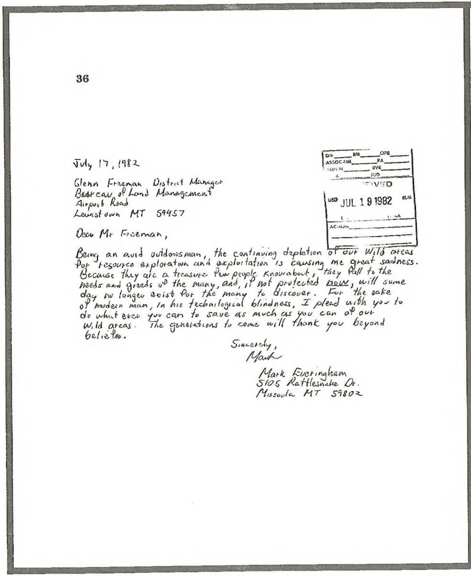
C I believe that the views of people in the area should be given consideration when a decision is made as to whether tracts should be given a Wilderness classification. I am not anti-Wilderness. I believe there are areas such as the BobMarshall and Beartooth -Absarokee area having Wilderness characteristics.

I would say leave these tracts of public land as they now are and encourage a Multiple Use concept.

Yours very truly

Harry H. Olson

Harry [illegible] Olson



36

DM RM OPR
ASSOC-DM PA
ADMIN RVR
A JUD
IVED
USD JUL 19 1982 BLM
ACTION

July 17, 1982

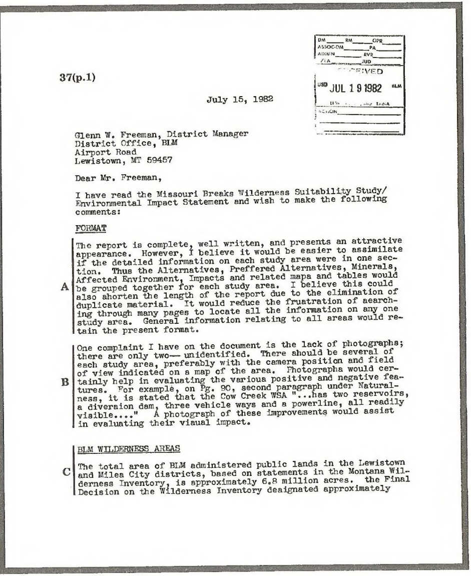
Glenn Freeman District Manager
Bureau of Land Management
Airport Road
Lewistown MT 59457

Dear Mr Freeman,

Being an avid outdoorsman, the continuing depletion of our Wild areas for resource exploration and exploitation is causing me great sadness. Because they are a treasure few people know about, they fall to the needs and greeds of the many, and, if not protected now, will some day no longer exist for the many to discover. For the sake of modern man, in his technological blindness, I plead with you to do what ever you can to save as much as you can of our Wild areas. The generations to come will thank you beyond belief.

Sincerely,
Mark

Mark Everingham
5105 Rattlesnake Dr.
Missoula MT 59802



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DM RM OPR
ASSOC-DM PA
ADMIN RVR
A JUD
EIVED
USD JUL 19 1982 BLM
ACTION

July 15, 1982

Glenn W. Freeman, District Manager
District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman,

I have read the Missouri Breaks Wilderness Suitability Study/ Environmental Impact Statement and wish to make the following comments:

FORMAT

A The report is complete, well written, and presents an attractive appearance. However, I believe it would be easier to assimilate if the detailed information on each study area were in one section. Thus the Alternatives, Preffered Alternatives, Minerals, Affected Environment, Impacts and related mapa and tables would be grouped together for each study area. I believe this could also ahorten the length of the report due to the elimination of duplicate material. It would reduce the fruatration of aearching through many pages to locate all the information on any one study area. General information relating to all areas would retain the present format.

B One complaint I have on the document is the lack of photographs; there are only two— unidentified. There ahould be several of each study area, preferably with the camera position and field of view indicated on a map of the area. Photographa would certainly help in evaluating the varioua positive and negative features. For example, on Pg. 90, second paragraph under Naturalness, it is stated that the Cow Creek WSA "...has two reservoirs, a diveraion dam, three vehicle ways and a powerline, all readily visible...." A photograph of these improvements would assist in evaluating their viaual impact.

BLM WILDERNESS AREAS

C The total area of BLM administered public lands in the Lewistown and Milea City districts, based on statements in the Montana Wilderness Inventory, is approximately 6.8 million acres. the Final Decision on the Wilderness Inventory deaignated approximately

37(p.2)

214,000 of these acres as wilderness study areas. Assuming the same ratio of recommended wilderness designation for the Powder River and Billings Resource areas as for the study areas covered in this Suitability Study, a total of approximately 100,000 acres will be recommended for wilderness. This amounts to about 1.5% of the lands in the Lewistown and Miles City BLM districts – a very small portion of these lands to preserve in their natural state.

C It is true that a considerable amount of acreage in Montana has been designated or endorsed as wilderness, but most of this is treed land of an entirely different character than the BLM lands. As yet there are no BLM wilderness areas in Montana and it appears that there will be precious few.

Everyone has different attitudes on wilderness preservation based on their own environment and life-style. Those who live in an area that is sparsely populated and with large amounts of open untouched land think wilderness designation is nonsense and an infringement on their personal freedoms. Other persons residing in areas where huge amounts of farms and forests have been converted into highways, airports, housing developments, shopping centers, etc., usually favor preserving larger amounts of wilderness. Of course a compromise has to be made between these two outlooks when designating wilderness areas. I believe, however, that the BLM has favored the opinions of a relatively few ranchers, oil companies, and natural gas companies in arriving at many of the wilderness area decisions.

LIVESTOCK GRAZING

D Table 3.2 on Pg. 42, lists those grazing allotments with "custodial" management stature, however, this type of management is not listed in the Glossary. The table also does not indicate if this is existing or proposed custodial status.

E It would assist in evaluation if the application date for the proposed AMPs and the proposed range improvements were given, relative to the date the areas were designated wilderness study areas. It would appear to be significant that only about one-third of the AUMs are existing and actually being utilized.

F The market value of the BLM grazing permit should not be a factor in determining the wilderness or non-wilderness status of an area. This is public land and belongs equally to every citizen of the United States. It should not be used for the financial gain of any one individual. Although not mentioned in the Impact Analysis, one of the factors in determining loan and sale values of ranch properties is the fact that the permit fee per AUM on BLM land is lower than the comparable rental of private property. I believe

37(p.3)

G that as a general policy the BLM grazing fees should be set at the same level as the costs on local private property.

H It is true that there would be an increase in grazing operating costs on wilderness areas due to restrictions on vehicle use. As indicated in Table 2.2, Impacts Summary, these increases appear to be quite small, although the percentage of the increase to the total maintenance costs is not stated. In fairness to the rancher utilizing the grazing privilege I would suggest that the permit fee on wilderness areas be reduced to offset any increased maintenance costs resulting from wilderness designation.

MINERALS

I The high natural gas potential rating for the Dog Creek, Stafford, Ervin Ridge, Woodhawk, Cow Creek, and Antelope Creek study areas is not supported by the information presented in the Suitability Study. Of the thirteen gas wells drilled on these areas, all have been dry holes. All of the BLM land in the 12 wilderness study areas has been open to mineral exploration and development for many years, but no commercial deposits of any mineral have been found.

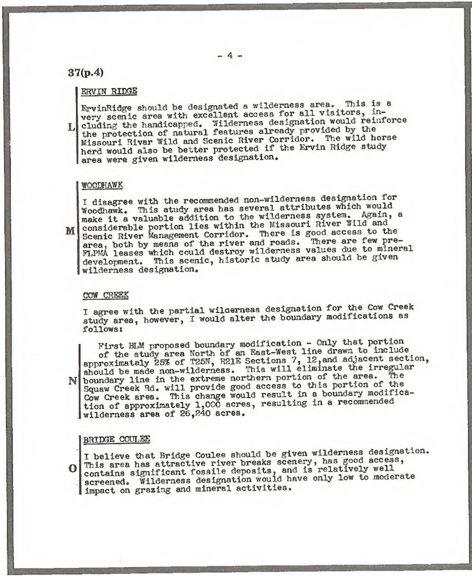
J I do not believe that mineral potential should be a factor in determining the wilderness suitability for these areas since the Wilderness Management Policy makes adequate provisions for mineral extraction. In the event that a major mineral discovery is made on a wilderness area it is always possible to change from wilderness to non-wilderness designation. However, the opposite process – non-wilderness to wilderness – would never occur if no major discover were made.

****

The points discussed above apply to all of the 12 study areas. In addition, I disagree with the preferred alternative on the following individual areas:

K DOG CREEK SOUTH & STAFFORD

I believe that both of these areas should be designated as wilderness. The major portion of the areas lie within the Missouri River Wild and Scenic River Corridor which restricts development activities. The wilderness designation would therefore have minimal impact on non-wilderness type activities and would provide additional protection for the natural features. Even if no land access is provided to these areas, the narrow configuration, adjacent location, and excellent access from the Missouri River would make them a valuable addition to the wilderness system.



37(p.4)

ERVIN RIDGE

L ErvinRidge should be designated a wilderness area. This is a very scenic area with excellent access for all visitors, including the handicapped. Wilderness designation would reinforce the protection of natural features already provided by the Missouri Rivar Wild and Scenic River Corridor. The wild horse herd would also be better protected if the Ervin Ridge study area were given wilderness designation.

WOODHAWK

M I disagree with the recommended non-wilderness designation for Woodhawk. This atudy area has several attributes which would make it a valuable addition to the wilderness system. Again, a considerable portion lies within the Missouri River Wild and Scenic River Management Corridor. There is good access to the area, both by means of tha river and roads. There are few pre-FLPMA leases which could destroy wilderness values due to mineral development. This scenic, historic atudy area should be given wilderness designation.

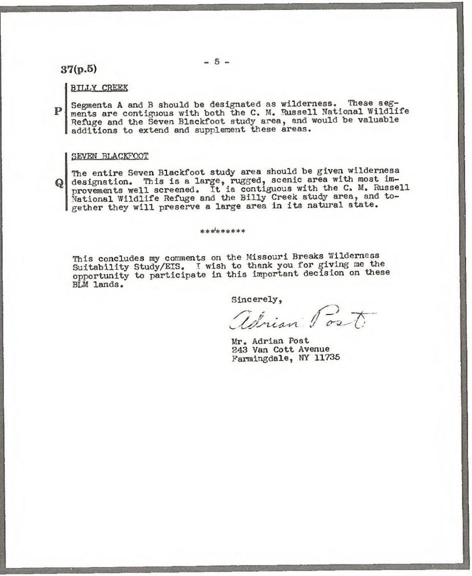
COW CREEK

I agree with the partial wilderneaa designation for the Cow Creek study area, however, I would alter the boundary modifications as followa:

N First BLM proposed boundary modification - Only that portion of the atudy area North of an East-West line drawn to include approximataly 25% of T25N, R21E Sections 7, 12,and adjacent section, should be made non-wilderness. This will eliminate the irregular boundary line in the extreme northern portion of the area. The Squaw Creek Rd. will provide good access to this portion of the Cow Creek area. This change would result in a boundary modification of approximately 1,000 acrea, resulting in a recommended wilderness area of 26,240 acres.

BRIDGE COULEE

O I believe that Bridge Coulee should be given wilderness designation. This area has attractive river breaks scenery, has good access, contains significant fossile deposits, and is relatively well screened. Wilderness designation would have only low to moderate impact on grazing and mineral activities.



37(p.5)

BILLY CREEK

P Segmenta A and B should be designated as wilderness. These aegments are contiguous with both the C. M. Russell National Wildlife Refuge and the Seven Blackfoot study area, and would be valuable additions to extend and supplement these areas.

SEVEN BLACKFOOT

Q The entire Seven Blackfoot study area should be given wildernesa designation. This is a large, rugged, scenic area with most improvements well screened. It ia contiguous with the C. M. Russell National Wildlife Refuge and the Billy Creek atudy area, and together they will preserve a large area in its natural atate.

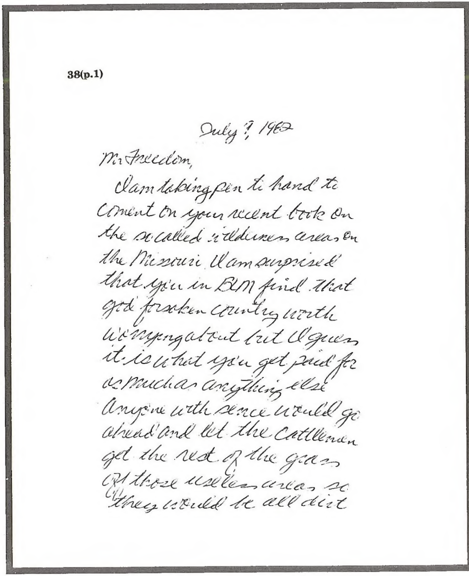
****

This concludes my comments on the Missouri Breaks Wilderness Suitability Study/EIS. I wish to thank you for giving me the opportunity to participate in this important decision on these BLM lands.

Sincerely,

Adrian Poat

Mr. Adrian Poat
243 Van Cott Avenue
Farmingdale, NY 11735

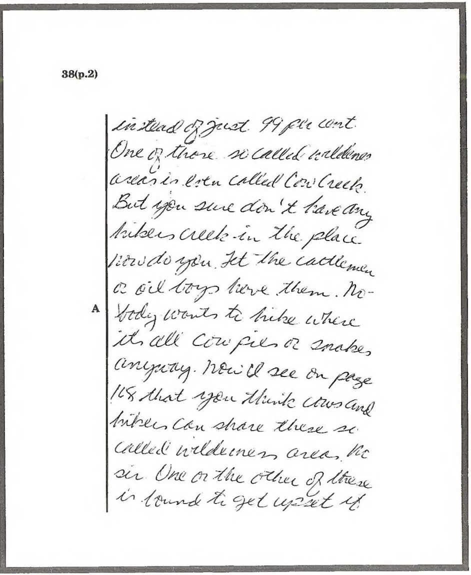


38(p.1)

July 7, 1982

Mr Freedom,

I am taking pen to hand to coment on your recent book on the so called wilderness areas on the Missouri. I am surprised that you in BLM find that god forsaken country worth worrying about but I guess it is what you get paid for as much as anything else. Anyone with sence would go ahead and let the cattlemen get the rest of the grass off those useless areas so they would be all dirt



38(p.2)

instead of just 99 per cent. One of those so called wilderness areas is even called Cow Creek. But you sure don't have any hikers creek in the place now do you. Let the cattlemen or oil boys have them.

A No-body wants to hike where its all cow pies or snakes anyway. Now I see on page 108 that you think cows and hikers can share these so called wilderness areas. No sir. One or the other of these is bound to get upset if

38 (p. 3)

They share. I also see you think it is called for to drive a bull into these so called wilderness areas to service the cows. In my day bulls didn't need a taxi to get to the cows. They were happy enough to walk and I doubt if they have changed their minds much in the last 30 yrs Other than these two coment I would say the whole book is pretty poor.

Yrs Very Truly,
Lardell Phlocs

Box 7
Missoula, Mont. 59801

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mec
MINERALS
EXPLORATION
COALITION

PLEASE NOTE NEW ADDRESS:

P. O. Box 15638
Denver, Colorado 80215

DM RM OPR
ASSOC DM PA
ADM H RVR
P/S
…IVED
USD JUL 19 1982 BLM
ACT…

39(p.1)

July 14, 1982

Mr. Glenn W. Freeman
District Manager
District Office, BLM
Airport Road
Lewiston, Montana 59457

Dear Sir:

This letter constitutes the written comments of the Minerals Exploration Coalition (MEC) on the Missouri Breaks Wilderness Suitability Study/Draft Environmental Impact Statement. The MEC represents mineral exploration companies and individuals conducting hard mineral exploration on federal land.

This statement, including the map supplement, constitutes a good example of minerals information prepared by the Bureau of Land Management to assess mineral resource values in wilderness study areas.

A In view of the fact that wilderness areas designated after December 31, 1983 will be withdrawn from appropriation under the mining and leasing laws, we believe that all areas with mineral and energy potential should be excluded from wilderness designation, even though no economic deposit is now known. The withdrawal limitations will preclude collection of new data and new areas of mineral potential will not be found. With new discoveries effectively stopped, the policy of excluding all currently known mineral potential from wilderness should be followed, so that exploration of these areas will not be restricted and minerals might yet be produced. Explorationists tend to look at the long term because the lead time of discovery may be ten to fifteen years. The impact of wilderness on minerals should be assessed over the long term (a century or more). We believe that land use decisions should be in conformity with the policy statements made in the National Minerals Program Plan and Report to Congress released by the President in April.

790 WEST TENNESSEE AVE., SUITE 103 • DENVER, COLORADO 80223 • (303) 722-2235

TO: Mr. Glenn W. Freeman -2- July 14, 1982

39(p.2)

As indicated in the minerals descriptions in the DEIS, much of the area of the WSA's have significant potential for oil and gas, and coal. Other minerals, bentonite and diamonds, have lesser potential.

The natural gas potential is quite substantial; in fact, some 44 percent (74.690 acres) of the area in the WSA's has high potential. The preferred alternatives reduced the "high potential" acreage to about 31,190, but this is still a substantial acreage; it is 39 percent of the area recommended as suitable.

B We believe that more emphasis should be given to oil and gas, coal, and mineral potential in determining suitability of these areas. The areas with any potential should remain open for exploration and production.

We thank you for the opportunity to offer our comments.

Sincerely,

MINERALS EXPLORATION COALITION

John D. Wells /mn

John D. Wells
Managing Director

JDW/mh

40(p.1)

KENNETH M. GOLDSMITH
555 FOREST ROAD
NORTHFORD, CT 06472

Dear Sir,

I have just finished reading the Missouri Breaks Wilderness Study EIS and am quite disappointed. I have visited this extremely scenic, rugged and wildlife-rich area several times, and

A strongly support the Conservationist's Alternative. In particular:

1) Burnt Lodge - I support BLM recommendation
2) Seven Blackfoot - I support more wilderness, especially in segment C
3) Billy Creek - support BLM Alternative 1
4) Terry Badlands - support BLM Alternative 2
5) The Wall - ~~suggest~~ recommend inclusion in study & designation as wilderness
6) Ervin Ridge, Bullwhacker, Chimney Bend } Recommend wilderness for these areas in entirety
7) Cow Creek - Bull Creek & Cow Creek West are outstanding & should be added to wilderness recommendation
8) Antelope Creek - add dropped 2,750 acres to recommendation

over →

40(p.2)

9) I especially support the Woodhawk W.S.A. for wilderness.

I am not a Montana resident, but locals should realize that wilderness in the area brings in tourist money (like mine) and is a better long-term investment than destroying the land for moderate natural gas production (of which we have a current surplus).

Sincerely,

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 25287
Denver, Colorado 80225

IN REPLY REFER TO:

41 L7619 (RMR-PC)

JUL 15 1982

Memorandum

To: District Manager, Bureau of Land Management, Lewistown, Montana

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Review of Missouri Breaks Suitability Study/Environmental Impact Statement (EIS) Blaine, Chouteau, Fergus, Garfield, Petroleum, Phillips, and Valley Counties, Montana (DES 82/23)

The National Park Service has reviewed the subject document. The proposal would not affect any units of the National Park System. However, it appears that the proposed non-wilderness designations for the Dog Creek South, Stafford, Ervin Ridge, and Woodhawk Wilderness Study Areas (WSA) could eventually allow extensive mineral exploration and development which would adversely impact the natural qualities of the Upper Missouri Wild and Scenic River corridor. The high probability of natural gas deposits in these four WSA's, plus the high percentage of land in oil and gas leases in each one, make mineral exploration and development likely under a non-wilderness designation.

A The document indicates that "Recreational" and "Scenic" designations do not afford the same degree of protection as a "Wild" designation. We recommend that the final environmental impact statement include a rationale as to the adequacy of a 1/4-mile corridor to protect the natural qualities of the river. Further, we recommend that the record of decision following the final EIS include a commitment from BLM to manage each of these WSA's in order to protect the river's wild and scenic status.

R. A. Strait
Richard A. Strait

DM
ASSOC-DM
ADMIN
USO JUL 19 1982
ACTION

Year of the Visitor

42

JOHN R. SWANSON
P. O. Box 922
Berkeley Calif. 94701

July 16, 1982

Mr. Glenn Freeman,
District Manager
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Mr. Freeman

Please accept my comments, as follows, concerning the Missouri Breaks Wilderness Suitability Study – Environmental Impact Statement – Draft.

I first "explored" this general area as a youngster prior to the Second World War, and am still of the firm opinion after these many decades that this Missouri Breaks area is an outstanding natural area containing not only wilderness but scenic, wildlife - fish, historic and cultural resources of prime national importance. A vital portion of our nations' natural heritage lands.

Land - water resources that as responsible citizens we must save from the forces of development, including urbanization - industrialization which very soon destroy such outstanding natural areas, and for all time.

With the clear acceptance that wilderness does provide the moral force and understanding so that each citizen may not only survive but may grow and prosper as a free people in a free land. For Wilderness means freedom. And to deny Americans their wilderness is to deny Americans their freedom.

A

I urge that the following areas, with acreages, be classified as wilderness and be included within our National Wilderness Preservation System. With the clear understanding that such following units represent only a portion of the total area managed by this Bureau that should be afforded wilderness.
• Billy Creek 3,750, • Lower Blackfoot 21,000, • Bridge Coulee 8,000, • Musselshell Breaks 11,000, • Terry Badlands 48,000, • Fords Creek 4,000, • Buffalo Creek 9,000, • Yellowstone River Islands – (contiguity) 1,450, • Bitter Creek 65,000, • Antelope Creek 15,500, • Burnt Lodge 17,000, • Stafford 7,500, • Ervin Ridge 20,000, • Cow Creek 50,000, • Pryor Mountain 18,000, • Big Horn Tack-on = 5,000, • Burnt Timber Canyon 5,250, • Twin Coulee 7,350, • [illegible] Creek 10,000, • Dog Creek South = 5,500, • The Wall 7,350, • Bullwhacker 12,000, • [illegible] 14,000, • Woodhawk 11,000.

The above acreage of nearly 400,000 acres located within the Lewistown and Miles City districts represent distinct wilderness - potential units each fully worthy of complete wilderness classification. And with the understanding that such acreage represents only a portion of the wilderness lands within these districts as managed by this agency.

And may I stress the need for prompt land exchanges so that holdings may be consolidated.

During the latter half of 1952, I suggested a Great Plains National Park to include several units managed by this Bureau in this particular portion of Montana; from Canada to Fort Peck Lake, and west to the White Cliffs area. With the acreage of the several units to total some 2,000,000 acres. One of the world's great potential national parks.

Sincerely,
John R. Swanson

DM ___ AM ___ OPR ___
ASSOC DM ___ FA ___
ADMIN ___ SVC ___
P/EA ___ RES ___
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LEWISTOWN
ACTION ___

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43

July 19, 1982

Mr. Glenn W Freeman District Manager
District Office BLM
Airport Road
Lwqi s, MO 59457

Dear Mr. Freeman:

After cerefully reading the book on Missouri Breake it would seem that the alternativee have been considered and the future plenned for. My friends and I would not tend to wo ry excent that Mr. Reagan lacks all understanding of the importence of wilderness areas in protecting our countryy. end his appointeee such as Sec. Watt have etrong conflicts of interest which adversely affect their decisions. I read in a newsletter from BLM (I think the Oregon-Washington region that the main interest of BLM was to furthar develoning oil,gas,lumber geothermal etc ehich dist reseecd treasede think BLM is to protect our puolic lands and wildlifeSafe enery alternatives hava been know for years- some over a decade but not devaloped, Oil,gas,geother al are finite and

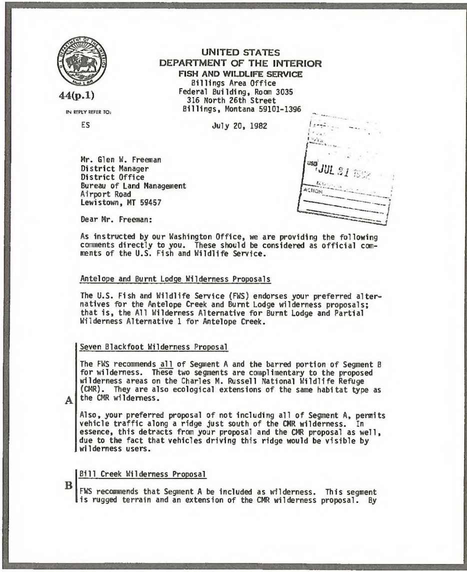
There are several refsrences to motorizsd recreation. ORV's, snowmobiles have damaged our land in Michigan causing serious erosion, hurting streeme and wildlife and increasing rates of vendalism and theft in remote areas. My friends in Californie say the seme is true for Califo nia.

So s ranchers allow overgrazing which ie bad for stock and has alreedy caused some desertificetionn. It ie the use of synthetics end imports which causes loeees not coyotas. Coyotes keep rabbits endd other ro ents and grasehoppers in check. Poachers are also busy but old myths die hard. A good large GUARD dog does wondere in protecting herds , are humane,do not cause injury

Yours truly,
Ethel W Thornley

Ms. Ethel W. Thorntley
18653 Schoenherr
Detroit, MI 48205

DM ___ AM ___ OPR ___
ASSOC DM ___ FA ___
ADMIN ___ SVC ___
P/EA ___
USD JUL 21 1982 BLM
LEWISTOWN



44(p.1)

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Billings Area Office
Federal Building, Room 3035
316 North 26th Street
Billings, Montana 59101-1396

IN REPLY REFER TO:
ES

July 20, 1982

USDI JUL 21 1982
ACTION

Mr. Glen W. Freeman
District Manager
District Office
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

As instructed by our Washington Office, we are providing the following comments directly to you. These should be considered as official comments of the U.S. Fish and Wildlife Service.

Antelope and Burnt Lodge Wilderness Proposals

The U.S. Fish and Wildlife Service (FWS) endorses your preferred alternatives for the Antelope Creek and Burnt Lodge wilderness proposals; that is, the All Wilderness Alternative for Burnt Lodge and Partial Wilderness Alternative 1 for Antelope Creek.

Seven Blackfoot Wilderness Proposal

A

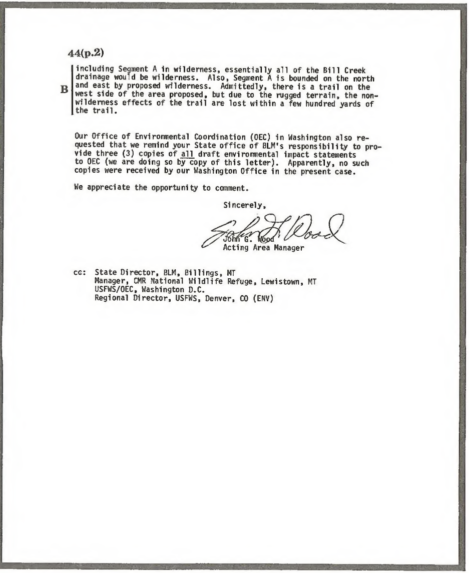
The FWS recommends all of Segment A and the barred portion of Segment B for wilderness. These two segments are complimentary to the proposed wilderness areas on the Charles M. Russell National Wildlife Refuge (CMR). They are also ecological extensions of the same habitat type as the CMR wilderness.

Also, your preferred proposal of not including all of Segment A, permits vehicle traffic along a ridge just south of the CMR wilderness. In essence, this detracts from your proposal and the CMR proposal as well, due to the fact that vehicles driving this ridge would be visible by wilderness users.

Bill Creek Wilderness Proposal

B

FWS recommends that Segment A be included as wilderness. This segment is rugged terrain and an extension of the CMR wilderness proposal. By



44(p.2)

B

including Segment A in wilderness, essentially all of the Bill Creek drainage would be wilderness. Also, Segment A is bounded on the north and east by proposed wilderness. Admittedly, there is a trail on the west side of the area proposed, but due to the rugged terrain, the non-wilderness effects of the trail are lost within a few hundred yards of the trail.

Our Office of Environmental Coordination (OEC) in Washington also requested that we remind your State office of BLM's responsibility to provide three (3) copies of all draft environmental impact statements to OEC (we are doing so by copy of this letter). Apparently, no such copies were received by our Washington Office in the present case.

We appreciate the opportunity to comment.

Sincerely,

John G. Wood
John G. Wood
Acting Area Manager

cc: State Director, BLM, Billings, MT
Manager, CMR National Wildlife Refuge, Lewistown, MT
USFWS/OEC, Washington D.C.
Regional Director, USFWS, Denver, CO (ENV)

MONTANA PUBLIC LANDS COUNCIL

P. O. BOX 1679 — HELENA, MONTANA 59601

JAMES E. COURTNEY .... ALZADA .... CHAIRMAN
RUSSELL UNRUH .... CHINOOK .... VICE CHAIRMAN
JOHN J. BAUCUS .... HELENA .... TREASURER
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LESTER JENS .... TERRY
GENE ETCHART .... GLASGOW
PAUL JOHNSON .... JACKSON
PETER V. JACKSON .... HARRISON

45(p.1)

DM
ASSOC.DM
ADMIN
P/EA
DM
FA
OPR
RVR
JUD
RECEIVED
JUL 21 1982
BLM
LEWISTOWN, MONTANA
ACTION

July 20, 1982

Mike Penfold, State Director
Bureau of Land Management
Box 30157
Billings, MT 59107

RE: MISSOURI BREAKS WILDERNESS SUITABILITY STUDY/EIS AND DILLON RESOURCE AREA

Dear Sir:

The Montana Association of State Grazing Districts, the Montana Public Lands Council and the Montana Stockgrowers Association wishes to thank you for soliciting our opinions on the proposed wilderness areas which you have recommended in the Missouri Breaks Wilderness Suitability Study and the Dillon Resource Area.

The study is a very thorough and complete inventory which identified many of the resource conflicts which are the result of a wilderness designation and we compliment your staff for that reason.

Nevertheless, our associations would like to reiterate the problems associated with wilderness.

Wilderness is purely and simply a single use of the land and a not very wise use at that.

A In a wilderness area, there is no resource management. Noxious weeds are actually protected; predators which prey on livestock are harbored, and wildlife cannot be properly managed because of lack of access.

B There are more problems with wilderness which directly effect the ranching community.

C Although the Wilderness Act of 1964 permits the grazing of livestock where established prior to the wilderness designation, grazing is subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture. As we in the livestock business have found, "reasonable regulations" are often subjected to the political arena where they become unreasonable. Furthermore, although grazing allowed, Section 4 (c) says there shall be "no permanent roads within wilderness areas, no temporary roads, no use of motor vehicles, motorized equipment; no structures or installations..." NO, NO, NO. As the BLM document admits, these restrictions increase the cost of operating on the public lands. Not only does wilderness increase operating cost, it decreases the value of permits. Financial lending institutions are beginning to become wary of ranches which are dependent on permits within wilderness areas.

45(p.2)

Mike Penfold
July 20, 1982
Page 2

C As Dr. Leroy Luft, a former Extension Economist for Montana State University, has pointed out in his economic analysis of wilderness designation, financial lending institutions will not consider permits within wilderness designations when they determine present market value of an operation. The Farmers Home Administration, the Federal Land Banks, and the Production Credit Associations do not place security value for lending purposes on those portions of public land that are contained within a wilderness area.

Looking at the specific widerness proposal we can only highlight those criticisms which the document itself mentions.

Cow Creek has potential for increased range productivity through new range developments. These would benefit livestock and wildlife. It also shows a high potential for natural gas. None of these resources will be realized if this area becomes a wilderness. This country is trying to become independent in its production of energy yet we continue to exclude energy independence by locking up land which has energy potential.

D It is our understanding that Cow Creek and Antelope Creek are covered by pre-FLPMA leases. Pre-FLPMA lease holders have the right to drill and place pipelines in the proposed wilderness. This fact alone should make wilderness designation an **E** impossibility in these areas. We question also why the BLM recommends an area that includes a state section. Should not the Bureau obtain the section through trade before suggesting a wilderness designation?

F A final problem with both CowCreek and Antelope Creek is that they contain several roads. Although the BLM inventory handbook denies that these are roads, the fact remains that they have been and still are used by miners, ranchers, sportsmen and even BLM personnel. These roads definitely detract from the wilderness quality of the area.

G The Missouri Breaks study readily admits that Antelope Creek's opportunity for solitude is seriously limited by the proximity of U.S. Highway 191. It also says there are not singular outstanding recreational opportunities. The only rationale seems to be the "physiographic continuation of CMR's Antelope Creek study unit." **H** I respectfully refer you to a recent decision by the Interior Board of Land Appeals on 11 BLM wilderness recommendations in Nevada. According to the IBLA, each unit must stand on its own merit and not as a unit contiguous to land administered by another agency.

This problem is apparent on the Seven Blackfoot recommendation. The study states that "neither unit contains the wilderness characteristics to stand on their own..."

I We oppose the designations for Burnt Lodge and the Terry Badlands because we do not feel that outstanding wilderness values ever outweigh the potential resource conflicts. The production of food and fiber should always have priority over recreation. Especially when one considers that world population will double in the next 50 years. The job of feeding the world is fast becoming a serious challenge for everyone, including federal land managers.

Wilderness recommendations for the Dillon Resource area, Ruby Mountains, Blacktail, and Farlin Creek have problems similar to the Missouri Breaks. The Ruby

45(p.3)

Mike Penfold
July 20, 1982
Page 3

Mountains recommendation contains a state section along with a patented mining claim. Again, the BLM should not recommend such lands until acquisition of the non-federal lands has been made. Otherwise, this is a hidden form of condemnation. Ruby Mountains also contain talc potential. Madison County is highly dependent on this resource.

The recommendation for the Blacktail Mountains is particularly disturbing because it contains a 40 acre in-holding and two state sections. John Conover has maintained and operated a cow camp in this area for many years. The document admits this is a conflict and we agree. If a cow camp does not detract from solitude and other wilderness values, then nothing does. Furthermore, the guarantees of access and continued use are not assuring. Can the Bureau of Land Management make such guaranttes when Congress will make the final decision?

Farlin Creek is another example of a wilderness recommendation which cannot stand on its own merits. This 610 acre "tack-on" should be dropped from further consideration.

We respectfully submit that the Bureau of Land Management not recommend Cow Creek, Burnt Lodge, Antelope Creek, Seven Blackfoot or Terry Badlands in the Missouri Breaks area or Ruby Mountains, Blacktail and Farlin Creek for wilderness designations. Montana has already contributed over 3,000,000 acres to the National Wilderness Preservation System. We have done our share. Let's get back to the job of managing our resources instead of inventoring them to be locked up in wilderness.

We will be interested to see the final recommendations for these areas.

Sincerely yours,

William M. Brooke,
Public Lands Coordinator

WMB:mlt

Copies to:

Glenn W. Freeman, Lewistown
Dick Cosgriffe, Dillon

46

Quentin Reuer
505 ½ S. 12th
Bozeman, MT 59715

Glenn Freeman
District Manager, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman;

I am writing to state my support for the
Conservationists Wilderness alternative, which
A proposes that 209,700 acres of land in the
Missouri Breaks, C.M. Russell wildlife, Musselshell
River, and Terry Badlands areas be designated
as wilderness. Land exchanges between BLM,
state, and private landowners may be necessary
B to accomplish this. Until a final decision
concerning this land has been reached, I
urge the BLM to do all in its power to
preserve these lands in a wilderness state.
Thank you.

Sincerely,
Quentin Reuer

JUL 23 1982
ACTION

AtlanticRichfieldCompany 555 Seventeenth Street
Denver, Colorado 80217
Telephone 303 575 7577

J. R. Mitchell
Public Lands Coordinator

47(p.1)

July 20, 1982

JUL 22 1982
ACTION

Glen W. Freeman
District Manager
District Office, BLM
Airport Road
Lewistown, Montana 59457

Re: Missouri Breaks Wilderness DEIS

Dear Mr. Freeman:

Atlantic Richfield appreciates this opportunity to comment on the Draft Environmental Impact Statement for the Missouri Breaks Wilderness Study Areas. We are opposed to the recommended designation of Seven Blackfoot and Burnt Lodge WSA's as wilderness. We support the preferred alternative recommendations of non-wilderness for Musselshell Breaks and Bridge Coulee.

A We believe the oil and gas potential for Seven Blackfoot is extremely high as stated in our previous comments to the BLM. There is excellent potential for tight gas production from U. Cretaceous silts and sands. The National Petroleum Council (NPC. Uncon. Gas Sources, Dec. 1980) estimates for the four possible productive zones beneath the study area are 11.7 Bcf/section, making total gas reserves for the acreage in question about 330 Bcf. Possible conventional gas sands exist in the Judith River formation. Several geophoto anomalies and structural lineaments are indicated directly on the study area. Good Palezoic potential exists for regional stratigraphic pinchouts, and structural closures over porous limestones, dolomite and sandstone. The area is very sparsely drilled, but there is substantial lease activity. Atlantic Richfield Company bas a leasehold interest in 38 sections, 24,320 acres, of the four townships affected by this recommendation.

B We believe that the decision to recommend Seven Blackfoot for wilderness does not consider the oil/gas potential of the area. Your evaluation of low to moderate oil and gas potential for this area

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47(p.2)

Glen W. Freeman
July 20, 1982
Page 2

B certainly was made without adequate information. We strongly oppose your recommendation for wilderness.

C We hope this information regarding the energy potential of this area will be considered and that your final recommendation will appropriately recommend this area for non-wilderness.

D We also believe Burnt Lodge has very high potential for the discovery of gas. The National Petroleum Council estimates tbe potential to be 11.7 Bcf/section for this study area, making total gas reserves for the acreage in question 280 Bcf. The geology for this area is similar to Seven Blackfoot. While we have no leases in the immediate townships, we are the dominant and controlling lease holder in T23-29N, R32-38E which are in close proximity to the WSA. It is difficult to understand why BLM indicates that this area also has a potential energy rating of moderate potential for gas. We believe this area should be recommended for non-wilderness.

We support the recommendation for non-wilderness for Musselshell Breaks and Bridge Coulee WSA's. While the evaluation of the mineral potential of these areas is also inaccurate, the non-wilderness recommendation is correct.

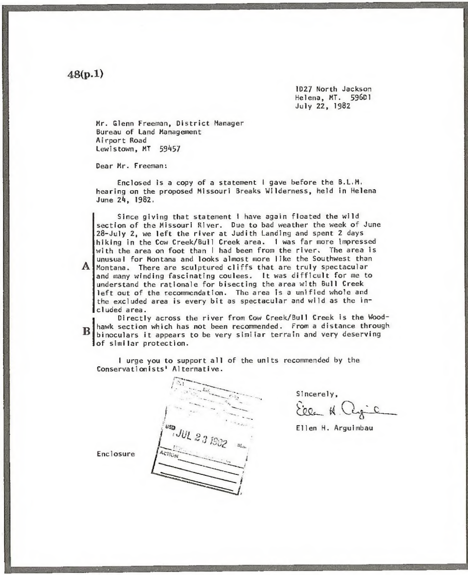
We appreciate the opportunity to state our concerns and urge you to fully consider these comments in arriving at your final decisions.

Sincerely,

Jay R. Mitchell

J. R. Mitchell

JRM:drm



48(p.1)

1027 North Jackson
Helena, MT. 59601
July 22, 1982

Mr. Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

Enclosed is a copy of a statement I gave before the B.L.M. hearing on the proposed Missouri Breaks Wilderness, held in Helena June 24, 1982.

A Since giving that statement I have again floated the wild section of the Missouri River. Due to bad weather the week of June 28-July 2, we left the river at Judith Landing and spent 2 days hiking in the Cow Creek/Bull Creek area. I was far more impressed with the area on foot than I had been from the river. The area is unusual for Montana and looks almost more like the Southwest than Montana. There are sculptured cliffs that are truly spectacular and many winding fascinating coulees. It was difficult for me to understand the rationale for bisecting the area with Bull Creek left out of the recommendation. The area is a unified whole and the excluded area is every bit as spectacular and wild as the included area.

B Directly across the river from Cow Creek/Bull Creek is the Woodhawk section which has not been recommended. From a distance through binoculars it appears to be very similar terrain and very deserving of similar protection.

I urge you to support all of the units recommended by the Conservationists' Alternative.

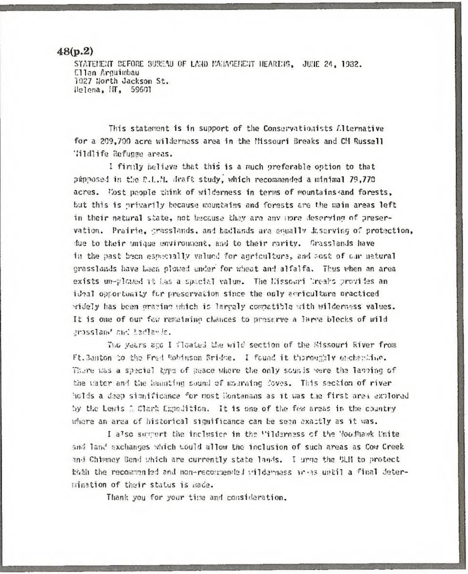
Sincerely,

Ellen H. Argi

Ellen H. Arguimbau

Enclosure

USD
JUL 23 1982
BLM
ACTION



48(p.2)

STATEMENT BEFORE BUREAU OF LAND MANAGEMENT HEARING, JUNE 24, 1982.
Ellen Arguimbau
1027 North Jackson St.
Helena, MT, 59601

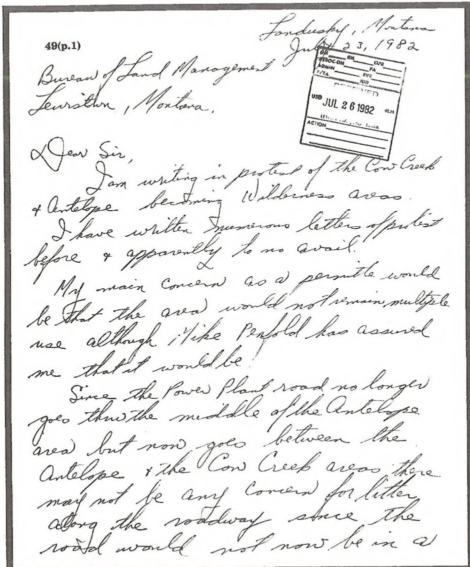
This statement is in support of the Conservationists Alternative for a 209,700 acre wilderness area in the Missouri Breaks and CM Russell Wildlife Refugge areas.

I firmly believe that this is a much preferable option to that proposed in the B.L.M. draft study, which recommended a minimal 79,770 acres. Most people think of wilderness in terms of mountains and forests, but this is primarily because mountains and forests are the main areas left in their natural state, not because they are any more deserving of preservation. Prairie, grasslands, and badlands are equally deserving of protection, due to their unique environment, and to their rarity. Grasslands have in the past been especially valued for agriculture, and most of our natural grasslands have been plowed under for wheat and alfalfa. Thus when an area exists un-plowed it has a special value. The Missouri Breaks provides an ideal opportunity for preservation since the only agriculture practiced widely has been grazing which is largely compatible with wilderness values. It is one of our few remaining chances to preserve a large blocks of wild grassland and badlands.

Two years ago I floated the wild section of the Missouri River from Ft.Benton to the Fred Robinson Bridge. I found it thoroughly enchanting. There was a special type of peace where the only sounds were the lapping of the water and the haunting sound of mourning doves. This section of river holds a deep significance for most Montanans as it was the first area explored by the Lewis & Clark Expedition. It is one of the few areas in the country where an area of historical significance can be seen exactly as it was.

I also support the inclusion in the Wilderness of the Woodhawk Unite and land exchanges which would allow the inclusion of such areas as Cow Creek and Chimney Bend which are currently state lands. I urge the BLM to protect both the recommended and non-recommended wilderness areas until a final determination of their status is made.

Thank you for your time and consideration.



49(p.1)

Sandusky, Montana
July 23, 1982

Bureau of Land Management
Lewistown, Montana.

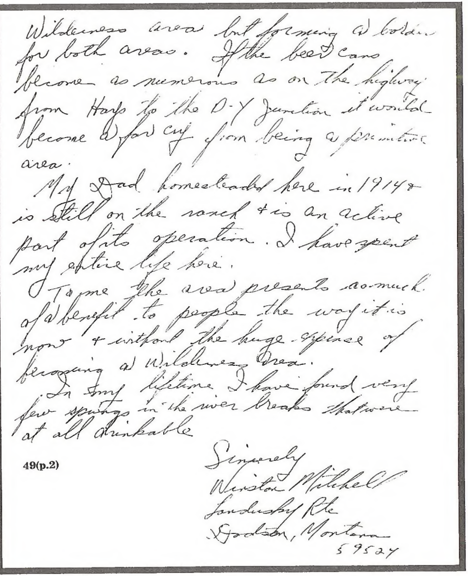
DM ___ RM ___ ASSOC-DM ___ OPR ___ ADMIN ___ PA ___ P/EA ___ RVR ___ JUD ___
RECEIVED
USD JUL 26 1982 BLM
LEWISTOWN DISTRICT AREA
ACTION ___

Dear Sir,

I am writing in protest of the Cow Creek & Antelope becoming Wilderness areas. I have written numerous letters of protest before & apparently to no avail.

My main concern as a permittee would be that the area would not remain multiple use although Mike Penfold has assured me that it would be!

Since the Power Plant road no longer goes thru the middle of the Antelope area but now goes between the Antelope & the Cow Creek areas there may not be any concern for litter along the roadway since the road would not now be in a



Wilderness area but forming a border for both areas. If the beer cans become as numerous as on the highway from Hays to the D-Y Junction it would become a far cry from being a primitive area.

My Dad homesteaded here in 1914 & is still on the ranch & is an active part of its operation. I have spent my entire life here.

To me the area presents so much of a benefit to people the way it is now & without the huge expense of becoming a Wilderness Area.

In my lifetime I have found very few springs in the river breaks that were at all drinkable

Sincerely
Winston Mitchell
Sandusky Rte
Dodson, Montana
59524

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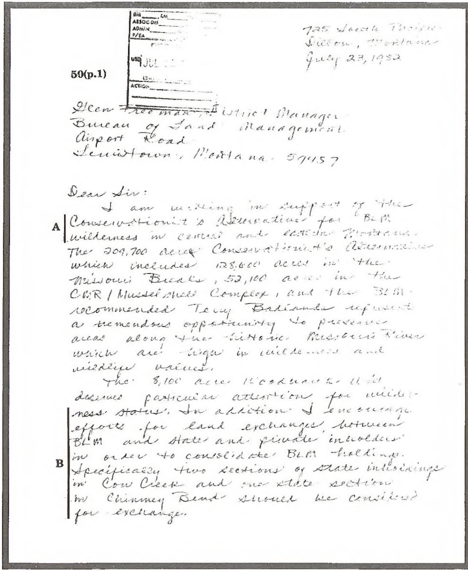

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BM ___ AM ___
ASSOC.DM ___
ADMIN ___
P/EA ___
USD JUL
ACTION ___

725 South Pacific
Dillon, Montana
July 23, 1982

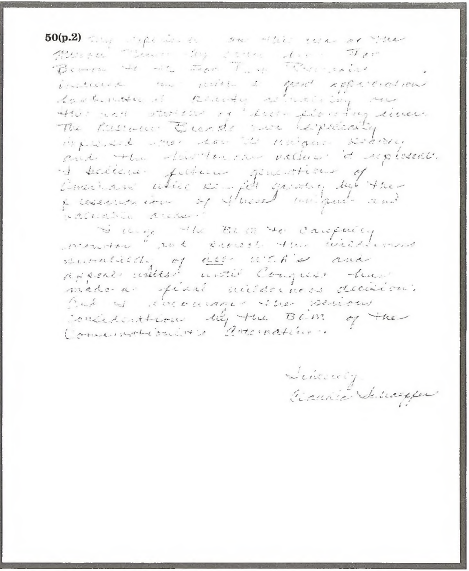
Glen Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Sir:

A I am writing in support of the Conservationist's Alternative for BLM wilderness in central and eastern Montana. The 209,700 acre Conservationist's Alternative which includes 128,000 acres in the Missouri Breaks, 52,100 acres in the CMR / Musselshell Complex, and the BLM recommended Terry Badlands represent a tremendous opportunity to preserve areas along the historic Missouri River which are high in wilderness and wildlife values.

The 8,100 acre Woodhawk WSA deserves particular attention for wilderness status.

B In addition I encourage efforts for land exchanges between BLM and State and private inholders in order to consolidate BLM holdings. Specifically two sections of State inholdings in Cow Creek and one state section in Chimney Bend should be considered for exchange.



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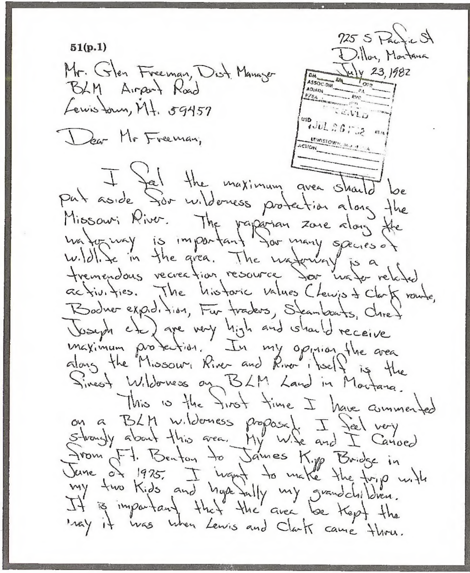
My experiences on this area of the Missouri River by canoe from Fort Benton to the Fred Robinson [illegible] instilled me with a great appreciation [illegible] of beauty [illegible] on this part stretch of free flowing river. The Missouri Breaks were especially impressed upon me for the unique scenery and the historical values it represents. I believe future generations of Americans will benefit greatly by the preservation of these unique and valuable areas.

I urge the BLM to carefully monitor and protect the wilderness values of all WSA's and appeals areas until Congress has made a final wilderness decision. And I encourage the serious consideration by the BLM of the Conservationist's Alternative.

Sincerely,



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925 S Pacific St
Dillon, Montana
July 23, 1982

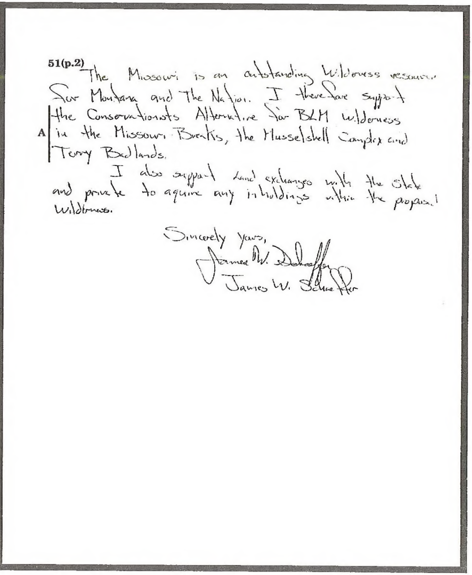
DM RM
ASSOC DM OPR
ADMIN PA
P/EA RVR
RECEIVED
USD JUL 26 1982
LEWISTOWN, MONTANA
ACTION

Mr. Glen Freeman, Dist. Manager
BLM Airport Road
Lewistown, Mt. 59457

Dear Mr Freeman,

I feel the maximum area should be put aside for wilderness protection along the Missouri River. The riparian zone along the waterway is important for many species of wildlife in the area. The waterway is a tremendous recreation resource for water related activities. The historic values (Lewis & Clark route, Bodner expedition, Fur traders, Steamboats, Chief Joseph etc) are very high and should receive maximum protection. In my opinion the area along the Missouri River and River itself is the finest Wilderness on BLM Land in Montana.

This is the first time I have commented on a BLM wilderness proposal. I feel very strongly about this area. My Wife and I Canoed from Ft. Benton to James Kipp Bridge in June of 1975. I want to make the trip with my two Kids and hopefully my grandchildren. It is important that the area be kept the way it was when Lewis and Clark came thru.



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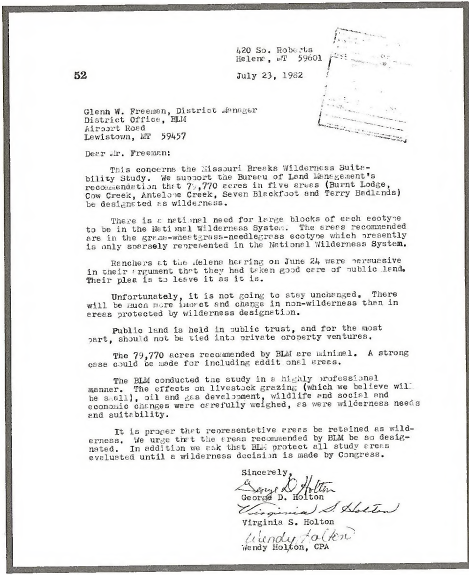
The Missouri is an outstanding Wilderness resource for Montana and The Nation. I therefore support

A | the Conservationists Alternative for BLM wilderness in the Missouri Breaks, the Musselshell Complex and Terry Badlands.

I also support land exchanges with the State and private to aquire any inholdings within the proposal wilderness.

Sincerely yours,

James W. Schaeffer
James W. Schaeffer



52

420 So. Roberts
Helena, MT 59601

July 23, 1982

Glenn W. Freeman, District Manager
District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

This concerns the Missouri Breaks Wilderness Suitability Study. We support the Bureau of Land Management's recommendation that 79,770 acres in five areas (Burnt Lodge, Cow Creek, Antelope Creek, Seven Blackfoot and Terry Badlands) be designated as wilderness.

There is a national need for large blocks of each ecotype to be in the National Wilderness System. The areas recommended are in the grama-wheatgrass-needlegrass ecotype which presently is only sparsely represented in the National Wilderness System.

Ranchers at the Helena hearing on June 24 were persuasive in their argument that they had taken good care of public land. Their plea is to leave it as it is.

Unfortunately, it is not going to stay unchanged. There will be much more impact and change in non-wilderness than in areas protected by wilderness designation.

Public land is held in public trust, and for the most part, should not be tied into private property ventures.

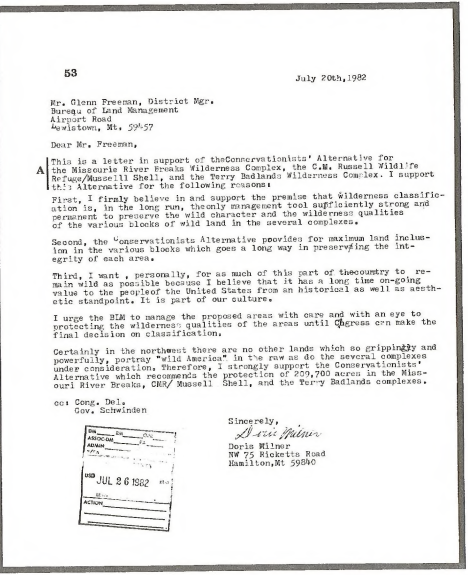
The 79,770 acres recommended by BLM are minimal. A strong case could be made for including additional areas.

The BLM conducted the study in a highly professional manner. The effects on livestock grazing (which we believe will be small), oil and gas development, wildlife and social and economic changes were carefully weighed, as were wilderness needs and suitability.

It is proper that representative areas be retained as wilderness. We urge that the areas recommended by BLM be so designated. In addition we ask that BLM protect all study areas evaluated until a wilderness decision is made by Congress.

Sincerely,

George D. Holton
George D. Holton
Virginia S. Holton
Virginia S. Holton
Wendy Holton
Wendy Holton, CPA



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July 20th,1982

Mr. Glenn Freeman, District Mgr.
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

Dear Mr. Freeman,

A This is a letter in support of theConservationists' Alternative for the Missourie River Breaks Wilderness Complex, the C.M. Russell Wildlife Refuge/Musselll Shell, and the Terry Badlands Wilderness Complex. I support this Alternative for the following reasons:

First, I firmly believe in and support the premise that wilderness classification is, in the long run, theonly management tool sufficiently strong and permanent to preserve the wild character and the wilderness qualities of the various blocks of wild land in the several complexes.

Second, the Conservationists Alternative provides for maximum land inclusion in the various blocks which goes a long way in preserving the integrity of each area.

Third, I want , personally, for as much of this part of thecoumtry to remain wild as possible because I believe that it has a long time on-going value to the peopleof the United States from an historical as well as aesthetic standpoint. It is part of our culture.

I urge the BLM to manage the proposed areas with care and with an eye to protecting the wilderness qualities of the areas until Congress can make the final decision on classification.

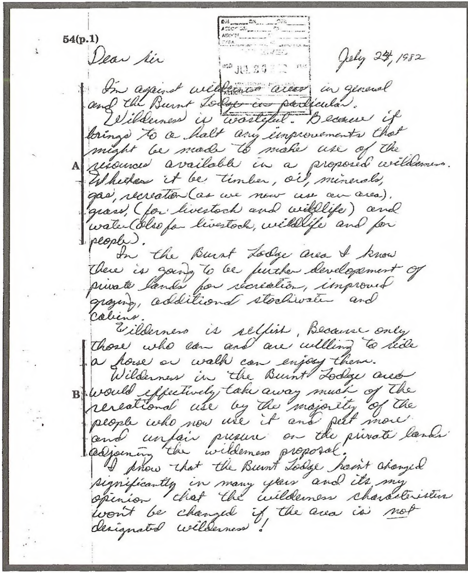
Certainly in the northwest there are no other lands which so grippingly and powerfully, portray "wild America" in the raw as do the several complexes under consideration. Therefore, I strongly support the Conservationists' Alternative which recommends the protection of 209,700 acres in the Missouri River Breaks, CMR/ Mussell Shell, and the Terry Badlands complexes.

cc: Cong. Del.
Gov. Schwinden

DM ___ RM ___ OPR ___
ASSOC-DM ___ FA ___
ADMIN ___
USD JUL 26 1982
ACTION ___

Sincerely,

Doris Milner
Doris Milner
NW 75 Ricketts Road
Hamilton,Mt 59840



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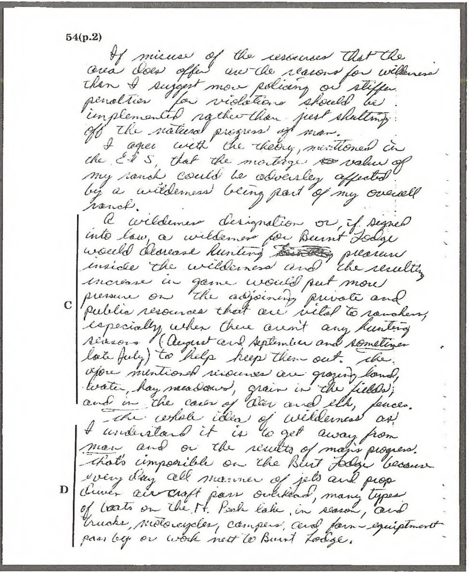
DM DA OPR
ASSOC DM PA
ADM'N
OPER
RECEIVED
JUL 26 1982
ACTION

Dear Sir July 24, 1982

I'm against wilderness areas in general
and the Burnt Lodge in particular.
Wilderness is wasteful. Because it
brings to a halt any improvements that
might be made to make use of the
A resources available in a proposed wilderness.
Whether it be timber, oil, minerals,
gas, recreation (as we now use an area),
grass, (for livestock and wildlife) and
water (Also for livestock, wildlife and for
people).
In the Burnt Lodge area I know
there is going to be further development of
private lands for recreation, improved
grazing, additional stockwater and
cabins.
Wilderness is selfish, Because only
those who can and are willing to ride
a horse or walk can enjoy them.
Wilderness in the Burnt Lodge area
B would effectively take away much of the
recreational use by the majority of the
people who now use it and put more
and unfair presure on the private lands
adjoining the wilderness proposal.
I know that the Burnt Lodge hasn't changed
significantly in many years and its my
opinion that the wilderness characteristics
won't be changed if the area is not
designated wilderness!



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If misuse of the resources that the
area does offer are the reasons for wilderness
then I suggest more policing or stiffer
penalties for violations should be
implemented rather than just shutting
off the natural progress of man.
I agree with the theory, mentioned in
the E I S, that the mortgage ~~to~~ value of
my ranch could be adversley affected
by a wilderness being part of my overall
ranch.
A wilderness designation or, if signed
into law, a wilderness for Burnt Lodge
would decrease hunting pressure
inside the wilderness and the resulting
increase in game would put more
pressure on the adjoining private and
C public resources that are vital to ranchers,
especially when there aren't any hunting
seasons (August and September and sometimes
late July) to help keep them out. The
afore mentioned resources are grazing land,
water, hay meadows, grain in the fields,
and in the cases of deer and elk, fences.
The whole idea of wilderness as
I understand it is to get away from
man and or the results of man's progress.
That's impossible on the Burnt Lodge because
every day all manner of jets and prop
D driven aircraft pass overhead, many types
of boats on the Ft. Peck lake in season, and
trucks, motorcycles, campers, and farm-equipment
pass by or work next to Burnt Lodge.

54(p.3)

E Also, I'm not in favor of the Burnt Lodge area because I have no guarantee that sometime in the future my livestock that graze the area will be too much for the pure wilderness minded individual and my grazing privileges will be taken away.

F If attention isn't drawn to the Burnt Lodge by making it a wilderness it will remain wild and beautiful and relatively untouched by man. But if it is labeled a wilderness sometime in the future it might be crawling with people instead of the wildlife that now *live* there.

G The last straw to me is that it seems that the same people who are trying to restrict my use of the Burnt Lodge for economic reasons (a good honest days work) all they want to use it for is play. Somehow, to me, that just doesn't seem right to destroy *some* ones dreams of a lifelong occupation just so another, whose life is easier because of efficient farms & ranchers, can *play*!

Sincerely,

John A. [illegible]

55(p.1)

USD JUL 26 1982 BLM
ACTION

July 23, 1982

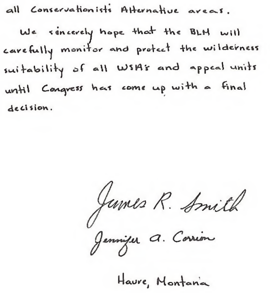
Dear Mr. Freeman,

A We are writing to urge you to support the Conservationist's Alternative for BLM wilderness in central and eastern Montana. We strongly support all parts of the Conservationists' Wilderness Alternative because we have seen a good part of central and eastern Montana and we feel that this beautiful part of our country, the praries and mountains, should be protected for future generations. We are especially concerned that some of the beautiful Montana prarie be preserved in its unaltered state.

Last summer we canoed down the Missouri River from Ft. Benton to Kipp State Park. Along the way we happened to stop in the Woodhawk area and spend a day hiking. We both feel that this area is exceptional and urge you to recommend this area as a wilderness area.

B We would also like to support land exchanges between the BLM and the state in order to consolidate BLM holdings within

55(p.2)



all Conservationists Alternative areas.

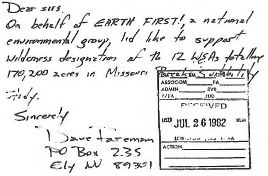
We sincerely hope that the BLM will carefully monitor and protect the wilderness suitability of all WSA's and appeal units until Congress has come up with a final decision.

James R. Smith

Jennifer A. Corrion

Havre, Montana

56



Dear sirs.

On behalf of EARTH FIRST!, a national environmental group, I'd like to support wilderness designation of the 12 WSAs totalling 170,200 acres in Missouri Breaks Suitability Study.

Sincerely

Dave Foreman
PO Box 235
Ely NV 89301

DM ___ ADM ___ DFR ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
P/EA ___ JUD ___
RECEIVED
USD JUL 26 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

57

DM ___ RM ___ OPR ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
P/EA ___ JUD ___
RECEIVED
USDI JUL 26 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

The badlands North of Terry Which is being proposed as a wilderness area has played a very big part of my life.

With pasture neighboring this area I have had countless appertunities to ride horseback through it, hunt & camp in it & Float the river past it.

Through the years I have found many Indian artifacts, several buffalo skulls ~~and even a~~ (big horn sheep)? skulls and even a jaw resembeling that of a shark. I doubt very much wether there will be much change if this area becames a wilderness or not, but I for one hope it stays as untamed, yet peasefull as it is now.

A IF the Terry bad'ands becames a
wildeness area I don't think the boundry
line's can or should follow a section line
rather a natural boundry such as the
divide between Cherry Creek and all the
other small creeks that flow to the
B river. I think th scenee view road
should be kept open so that many
people too old to enjoy a walk into this
area can drive to this Vantage point
from the top of scenic view much of the
Proposed area and in ~~[illegible]~~ oppinion
the ruggedest, can be seen.

Dan Thomason

58(p.1)

July 25, 1982

DM ___ RM ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
RECEIVED
USDI JUL 27 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

Glenn W. Freeman
District Manager
District Office
BLM
Airport Road
Lewistown, Montana 59457

Mr. Freeman,

I represent Earth First! in submitting the following comments on the Missouri Breaks Wilderness Suitability Study/Environmental Impact Statement. Please enter my remarks in the official register as such.

I preface my comments on specific WSAs with the following statements.

The Missouri River, between Fort Benton and Kipp State Park, contains recreational, scenic, and wild components of the Wild and Scenic Rivers System. These designations are legislative testimony to the grandeur, wildness, and importance of the Missouri River. Earth First! believes the perfect complement to WSRS classification is inclusion into the National Wilderness Preservation System.

A In many cases, the river-corridor WSAs are wilderness. The Wilderness Suitability Study does not address the possibility of a linear river-corridor BLM wilderness. Instead, the BLM has arbitrarily divided the contiguous shoreline and adjacent river areas in a manner showing little regard for the lay of the land or popular recreational use patterns.

B Wilderness designation of the Missouri Breaks WSAs would be an important step in realizing one of the intents of the Wilderness Act: to provide representation of major ecosystems, in this case a prairie-river wilderness. A Missouri Breaks River Corridor Wilderness would serve two valuable functions: (1) preserve the native prairie grass ecosystem, and (2) provide river recreationists the opportunity to visit wilderness by water, an opportunity that is sadly lacking in the Wyoming-Dakota-Montana prairie bio-region.

In recommending non-wilderness for several of the units, the Wilderness Suitability Study claims size as a negative factor in wilderness consideration. Given the character of the larger area in question (the river corridor), the size criteria cannot be applied in the same manner as are "land-locked"
C WSAs. In particular, much of the wilderness is adjacent--within ¼ mile--
to the Missouri. Visitors travelling via watercrafts often only see the river-lining cliffs and coulees draining to the water. Irrigated farmlands or grazed pastures on plateau tops affect neither the natural ecology of the river area or a visitor's perception of wilderness. I'll make specific comments when I address the WSAs individually. It is important to realize, however, that, in many instances, a small river-corridor wilderness could be effectively managed by the BLM.

58(p.2)

D Another misinterpreted wilderness attribute is solitude. In many cases, the Suitability Study claims solitude is disrupted by some human factor. According to the BLM Wilderness Review directives, a WSA has solitude if solitude may be found in any part of the area. Therefore, the dubious affect of a rancher's dirt trail on solitude values becomes irrelevant if a visitor may find solitude somewhere within the unit.

Comments on individual units:

Dog Creek South:

E The document claims this WSA, because of "small size...major offsite influences... on adjacent farmed benches" contains "limited opportunities for outstanding solitude." This is erroneous. A person does not need to be in the middle of a million uninhabited acres to feel solitude. Size of this area is irrelevant. When climbing up or down through one of the many coulees leading from the high cliffs to the river, a visitor is submerged, hidden from the eyes of the world. I found the treacherous white sandstone coulees to be challenging enough to make me temporarily forget any thought of civilization I had previously entertained. Further, the view of the river area (including farmed fields) from the cliff tops creates a grand feeling of detachment from civilization. To experience solitude, a visitor does not have to view only wilderness, he or she must feel immersed enough in nature to feel more a part of the wilds than of civilization. The Dog Creek South WSA offers such opportunities.

The Study claims the unit lacks primitive non-recreation opportunities. Who's kidding whom? Here's what I did in Dog Creek South: canoe, swim, bike, photograph nature, scramble in coulees, and contemplate nature. These activities satisfied my desire for recreation.

Next, the Suitability Study claims that scenic quality suffers from "so many developed areas...within view." To those offended by the sight of farmed fields and ranch houses, I say, "Look instead at the WSA." The beautiful whitebark pine-juniper forests, sagebrus , prickly pear cacti, and native grasses compose a most outstanding vista on top of the cliffs. On the bench above the river, I found the sage and flowering prickly pear plain totally unique to my wilderness experiences. I'd welcome this ecosystem in the NWPS.

F Two statements about Doug Creek South particularly concern me. One is repeated in "No-Wilderness" recommendations throughout the Study. That is the BLM's insistence that "long term conflicts with the minerals industry could occur if this WSA were designated." This is not a criteria of wilderness suitability!!! According to law, areas recommended for wilderness suitability should be studied for mineral values (as well as wilderness values) before final agency recommendation. At this stage, the BLM may consider mineral potential, but you are breaking the law when you throw out areas because of conflict with the minerals industry!

G The other dubious factor contributing to the No-Wilderness Alternative is "Wilderness designation would...cause...one adjacent rancher to close access... through his land." Again, this is not a criteria! The BLM is mandated through FLPMA to study this roadless area for wilderness suitability. The BLM is not mandated to study private landowner's reactions to wilderness designation! It disturbs me to see a federal agency charged with managing my public lands break the law and its own directives so flagrantly.

58(p.3)

Stafford:

H The Wilderness Suitability Study purports that human intrusions "reduce the quality of solitude available." I didn't find that to be the case in Stafford. On the contrary, I found it difficult to even see the ferry crossings and roads. (I was looking for them.) Instead, I found a great deal of solitude in the deep coulees, tall canyons, and prairie rims. Travelling the river is a canoeists delight, with substantially no human impacts visible from the ranch two miles past Judith Landing to the ranch near Stafford Ferry (nearly 10 river miles.) This is testimony to the managability of a river wilderness. Travellers feel they are journeying through an unexplored waterway (with adjacent high cliff-banks.)

Again, the Study mentions the possibility of conflicts with the minerals industry. Refer to my Dog Creek South comments on this subject.

I The Study states, "Vehicle access...is through private land." Again, I remind you the recreational value of this wilderness exists via the Missouri River. Few people backpack in this water-shy area. Wilderness or no, the river is the main trail through the Breaks.

Ervin Ridge:

J The main reason for the No-Wilderness Alternative is "the potential for long-term conflicts from gas development." This is not a criteria! The BLM ranks this WSA highly on all wilderness attributes. Cooperation with ranchers facilitates wilderness and traditional grazing rights. The potential for conflict with diamond mining claimholders is not a valid reason to support No-Wilderness. If wilderness attributes are high and mining costs high with potential for discovery low, the BLM cannot justify the No-Wilderness Alternative on this basis.

Woodhawk:

This WSA was rated highly on solitude, primitive recreation, and scenery. Again, the main conflict seems to be with the minerals industry. Again, this conflict cannot be a concern in establishing wilderness alternatives.

K Another conflict involves rancher's access to stock reservoirs. Earth First! believes this is a problem that can be resolved to the mutual satisfaction of the ranchers, the cows, conservationists, and the land. Given the character of any future designated Missouri Breaks Wilderness (i.e. linear in concept and perception by river visitors), and the traditional open range utilization by area ranchers, Earth First! proposes a rather unique cooperative management plan for the Breaks. Continue to allow ranchers motorized vehicle access to reservoirs and grazing pastures (stick to existing jeep trails); but restrict that motorized use only to grazing lease holders and BLM personnel through use of a locked gate. That way, a rancher could maintain stock reservoirs and herds as necessary. We anticipate this would consstitute driving into wilderness only several times a year. Under this plan, a rancher could continue his grazing priviledges, the wilderness environment would be only minimally impacted, and most wilderness visitors would never see the truck tracks away from the river. Everyone would be satisfied, and the natural ecology of the Breaks would be protected.

58(p.4)

K The cherry-stem road in Woodhawk only penetrates half the unit. Two possible alternatives: control access (see preceding paragraph) or cherry-stem the WSA for wilderness designation. The impact of a little-used ranching road is negligble, both to an area's ecology and the perception of wilderness to visitors.

I have restricted my comments about individual WSAs to those units I have visited. I repeat, though, when considering Bridge Coulee, Musselshell Breaks, Billy Creek, Seven Blackfoot, Burnt Lodge, and Ferry Badlands, the potential for conflict with the minerals industry is not an adequate reason for recommending No-Wilderness. Neither is strong local sentiment against wilderness designation. The Missouri River is a national treasure, and local opinion must be weighed equally with non-local opinion.

The Earth First! plan for controlled stockmen's access into designated wilderness would work. The ranchers of the Breaks profess to love the land. A Missouri Breaks Wilderness Act could guarantee continuance of traditional grazing priviledges in a manner beneficial to the~~ir~~ rancher's livlihood and the wilderness.

Sincerely,

T Moore

Tony Moore
Earth First!
316 S. Spruce #2
Missoula, MT 59802

p.s. please add my name to your mailing list.

Garfield - McCone Legislative Association
SAND SPRINGS, MT. 406-557-6151

59

July 24, 1982

RECEIVED
JUL 27 1982
LEWISTOWN, MONTANA

Glenn W. Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

We appreciate the opportunity to comment on the proposed Wilderness study in our area. I would like to commend your Wilderness Review and Study teams for dropping from further study all proposed areas, excepting the Seven Blackfoot.

We recommend the Seven Blackfoot also be dropped from further study.

A One of the primary requirements of a wilderness is that it must enjoy solitude. The Seven Blackfoot area violates this by being surrounded on two sides by a rich farming area and on a third side by Fort Peck Lake with all of its water recreation, including noisy motor boats.

B Access is a problem, since to enter this area one must first get permission from private land owners. If this privilege was abused, access could be difficult.

It is apparent to us that access is now available and there are sufficient roads in the area for anyone interested to enter and enjoy.

C If, however, it were a wilderness, then many people would be excluded because of health, age, time, etc.. Actually, it would only benefit a very few.

We feel that by designating this area a wilderness, it would in fact become a single use area, violating the multiple use concept.

D There are several ranchers now operating here whose operation would be very much limited, thus hurting the local ecomony.

E Isolating an area such as a wilderness in the midst of a rich agricultural community can cause a multitude of problems. An example would be the hampering of local activities, such as control of noxious weeds. Also, Elk, which have become established in this area, are known to be infected with Leptospirosis. Eradication of this disease would probably be impossible if this had a wilderness designation.

F The Seven Blackfoot is a natural wilderness and it is highly unlikely it will ever be anything by a wilderness. It is a beautiful scenic area, suitable primarily for wildlife and livestock activities. It is now experiencing a limited amount of people traffic. To designate it a wilderness would only attract attention and probably be harmful to its ecosystem.

In summary, to make this area a wilderness would only set it aside forever for the benefit of a few. It it were left in its present state, it would benefit many, and contribute to the local economy.

We submit that better grazing practices and management techniques have vastly improved this area over the past 50 years. Most of this has come about by the planning and cooperation of the local ranchers and the Bureau of Land Management. We recommend the area be dropped from further study.

Sincerely,
Bill Brown, Jr. pres

60

1100 Missoula Avenue
Helena, MT 59601
July 26, 1982

Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

Please include this letter in the hearings record for BLM Wilderness.

A We support all aspects of the 209,700 acre CONSERVATIONIST'S WILDERNESS ALTERNATIVE. This includes 128,600 acres in the Missouri Breaks, 52,100 acres in the CMR Musselshell Complex, and the 20,020 acres of BLM recommended Terry Badlands Wilderness. We believe the 8,100 acre Woodhawk Unit is an especially important part of the CONSERVATIONIST'S ALTERNATIVE.

We are somewhat familiar with these areas, having been on the C. M. Russell Refuge. My wife's folks ranched for many years a few miles from the mouth of the Musselshell River.

The total amount of wilderness is about 2% of the 8 million+ acres of BLM land in Montana. This wilderness is particularly important because it provides protection for populations of deer, elk, and bighorn sheep, and is still one of the few places in the Northern Plains where native species can be restored to their original habitat.

Sincerely,

Noel and Irene Rosetta

Noel and Irene Rosetta

cc: Senator Max Baucus
Senator John Melcher

61

Helena, Montana 59601
July 24, 1982

Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, Mt. 59457

Dear Mr. Freeman:

A I write in support of the conservationist's alternative for BLM wilderness in central and eastern Montana. As a native Montanan who has hiked the mountains all my life I want to see as much wilderness area saved as possible. I find more and more people using our wilderness resource areas and we need more saved to protect wilderness values. For myself life wouldn't be worth much if I couldn't get out into the mountains every summer.

I request you to consider the 209,700 acre conservationists wilderness alternative which includes 128,600 acres in the Missouri Breaks ¢ 52,100 acres in the CMR Musselshell complex ahd the BLM recommended Terry Badlands wilderness, and the 8,100 acre Woodhawk Unit.

I urge you to minotor and protect these areas until Congress mas made its final wilderness determination.

Sincerely,

Martha A Hassell

Martha A. Hassell

CC to Senator Baucus

DM RM
ASSOC DM
ADMIN FA
27 1982
BLM

IFR INLAND FOREST RESOURCE COUNCIL
320 SAVINGS CENTER BUILDING MISSOULA, MONTANA 59801
PHONE (406) 728-1710

62

RECEIVED
USD JUL 27 1982 BLM

July 26, 1982

Mr. Glen W. Freeman
District Manager
Bureau of Land Management
Airport Road
Lewistown, Montana 59457

Dear Sir:

We have reviewed the draft of the Missouri Breaks Wilderness Suitability Study. We attended the hearing on these areas in Helena on June 24 and presented a brief statement at that time. In addition to those comments there are some supplementary comments that we would like to make.

A Even though there is no existing industry available to utilize any timber that might occur on these areas, we would not like to see commercial forest lands locked up to the point that they would not be available in the future. Your analysis does not show if there are commercial forest lands involved in any of these areas and, if so, how much. Even in central Montana the timber inventory should be part of the basic analysis.

There appear to be numerous conflicts between existing and potential resource uses that would preclude Wilderness on virtually all of the areas that you have studied. With the information at hand, we can see no true need for Wilderness designation for any of the areas.

Sincerely,

Larry B. Blasing

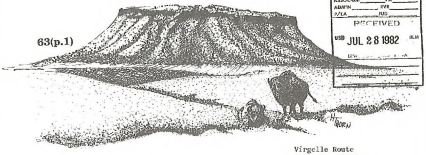
Larry B. Blasing
Director of Forestry Programs

LBB/bls

cc: Castle Mountain Corp.
Spring Creek Forest Products
Jim Bentley
Bob Netro

DEDICATED TO INTENSIVE MULTIPLE-USE MANAGEMENT OF OUR FOREST RESOURCES

63(p.1)



DM RM OPR
ASSOC-DM PA
ADMIN RVR
P/EA JUD
RECEIVED
USD JUL 28 1982 BLM

Virgelle Route
Loma, MT 59460

July 24, 1982

Mr. Glenn W. Freeman, District Manager
District Office, BLM
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman:

The Draft of the Missouri Breaks Wilderness Suitability Study is good reading and quite thorough, except that you forgot to study some areas. I should have been getting used to the process carrying forward only a part of a part of a part. But I really did expect you to conclude a wilderness recommendation for most of the study acreage. More qualifies.

Over three years ago, a member of the study team told me he didn't think there would be much wilderness recommendation along the river because the gas companies were coveting the area. He was right and even guessed which areas had a chance. I was more optimistic. I knew livestock operations and wilderness were generally compatible, especially in the long run. I felt wilderness protection for suitable areas within the river corridor would enhance wild and scenic river management. And there were responsible limits to oil and gas development.

Employment in the gas fields of the Bear Paw uplift is among the few good jobs available around here. This gas has a market and we need to burn it carefully. Even with the uproar in this country over accelerated leasing, mineral potentials are given the highest priorities in todays' Interior Department. So when Fuelco projects gas reserve values in excess of $30 million in the Missouri Breaks, wilderness values tend to get overshadowed and wilderness manageability tends to be more challenging. Meet the challenge, to preserve a balance. With or without wilderness stipulations on leases, Fuelco can well afford to develop and manage the gas fields in this national area with due respect. Let the turnstone roll a few back in place as it

A passes. With our without wilderness designation, in the long term does BLM intend to prevent further long-term impacts from gas operations in the Missouri Breaks which would affect wilderness

63(p.2)

A values? In the short term until Congress decides?

B When the study compared wilderness values to the value of other uses, it seems to me that the possible, projected, estimated natural gas reserves tipped the scales. Especially along the Missouri River. Even in the inventory stage, confict with gas field development must have been a prime consideration in dropping the important areas of West Cow Creek, Bullwacker, and the areas of Ervin Ridge, Stafford, and Chimney Bend where the planned gas pipeline is to cross the river. It would be valuable for future planning in these areas to have wilderness study comparisons and could have been efficiently done while the study team was in place. I support the conservationist appeal to IBLA defending wilderness study of these areas along the wild Missouri.

The draft EIS states that pre-FLPMA oil/gas leases in the different areas could have the most significant impact on wilderness manageability. Yet areas rated high for natural gas potential with past FLPMA leases have been dropped whenever possible from a wilderness recommendation because they would potentially restrict opportunities to explore the leases. I believe the biggest mistake from this judgment is the decision to recommend Woodhawk non-wilderness.

Woodhawk is said to have some outstanding opportunities for solitude, good primitive recreation opportunities, excellent scenery, the values of the adjacent river, and excellent public access. The draft also says the small size, central location of a cherry stemmed road and several resource conflicts combine to outweigh the wilderness values. I disagree with this last conclusion.

C The small size, 8,100 acres, accounts for only 2.5% of the possible, projected, estimated 500-square mile natural gas reserve. Nearly 90% of the unit is in post-FLPMA leases but 8% of the WSA is within 1/4 mile of the river and thus unavailable for mineral exploration or development. The 43% of the WSA in the river corridor should also carry lease stipulations. No test holes yet exist in this area, but it would seem that the first ones, if they come, would be along the existing roads or ridges where wilderness values would not be seriously impacted in the long term. The rough topography elsewhere generally discourages drilling and preserves wilderness values. The areas small size does not constitute a major loss of gas reserve and the existing cherry-stem and boundary/help prevent loss of opportunity to explore.
roads

63(p.3)

D The Woodhawk area has the least ranch-related economic impact of any area studied along the wild Missouri; $85 annual expense for loss of casual vehicle use. No new facilities are proposed for livestock management. The reservoirs in the southern portion are described as scattered and well screened and do not adversely influence natural values enough to outweigh the natural values. The protection of wilderness values in Woodhawk could make the job of maintence or reconstruction of the older reservoirs more challenging or not as easy but wilderness designation could not change the current level of livestock grazing and the necessary reservoirs would be maintained in the best way possible.

E The cherry-stemmed road does have the potential to periodically effect solitude, but actual conflicts between motorized and non-motorized users could resonably be expected to be few and far between, mostly during hunting. About 60% of the area has good to excellent screening vegetation and the road is quite well screened. The topography also provides good screening.

The Woodhawk WSA has only 43% of its acreage in the river corridor; 24% in the wild segment, 19% in the scenic part. This is the smallest percentage of protection afforded by the W&SMR in the four areas along the river recommend non-wilderness. The South side of the Missouri River needs a designated Woodhawk Wilderness to provide accessible opportunities for hiking and riding adventures and walk-in hunting opportunities in the protected wilderness setting. Please consider my arguments and conservationist support for a Woodhawk Wilderness recommendation.

Page 74 of the draft states, "The Missouri was the first river designated for multiple use management as such...with the management option for further protection or enhancement of the environment left open." Conservationists in the 70's as now-envisioned wilderness protection for suitable areas within and adjacent to the river corridor. Wilderness protection seems perfectly compatible with wild river management. The WSA's of Oog Creek South and Stafford lie

F 75% and 90% respectively within the river corridor, have been found to have good solitude opportunities, wilderness would cause insignificant impact to livestock management, and most of the mineral leases are pre-FLPMA. Why is the BLM apparently opposed to wilderness designation of roadless areas in the river corridor that already has some legislative protection of natural values?

63(p.4)

I have come to recognize from the study and draft that wildernes management in the Ervin Ridge WSA could be difficult with portions of the unit in KGSs and gas producing leases.

Also the potential for conflict and hard feelings exist with the possible relocation or cancellation of porposed range developments. Yet wilderness designation is needed to help protect the attractive scenery and natural setting from disturbances. I could help draw some new, more compatible boundaries if you need help.

G Of course my pencil would stray out ioto Bullwacker Creek and West Cow Creek. I would propose a land exchange with the state for the two sections on Ervin Ridge, the section in west Cow Creek, and the section near the river in Chimney Bend.

H How do you plan to protect and preserve wild and natural values in these highly scenic, important wildlife areas? (West Cow Creek, Bullwacker, Ervin Ridge, Chimney Bend.)

The Oil and Gas Envrionmental Assesment for the Lewistown District, September, 1981, states, "Continued use of abandoned vehicle trails made during oil and gas operations pose the greatest hazard to wilderness as far as residual impacts are concerned."

I It is exactly this "greatest hazard" which caused you to drop the outstanding Cow Creek West and Chimney Bend areas during the inventory stage. Do you expect to allow the roadless areas along this portion of the river both in and out of the corridor to become roaded? You could then turn the area into a park after the gas is extracted. Or do you plan to enhance and expand protection for this area, including placing sensitive areas off limits to gas development and the closing of present and future abandoned roads made during gas operations?

I have spent more time in the Cow Creek WSA than any other area in the study. It is true wilderness, and particularly beautiful, a historically rich jewel. I can support the no wilderness recommendation for the northern portion because it eliminates conflicts, and especially since the junctions of Hay and John Coulee and Squaw Creek are still within the wilderness recommendation. No road should be in Squaw Creek. I support the proposed land exchange with the state for the section in the recommendation, and also urge exchange for the section at the end of the Shetland Divide Road. This is desirable to allow inclusion of Coyote Coulee and a bit more of Bull Creek in the wilderness recommendation.

I also feel that segment B in the Antelope Creek WSA deserves a wilderness recommendation.

63(p.5)

It contains the main Antelope Creek drainage and is a logical tack on to the CMR Antelope Creek unit.

The Cow and Antelope Creek Wilderness recommendations are trimmed down proposals. You have eliminated most conflicts and economic impacts to the livestock industry. These roadless areas are mostly horseback country anyway. Considerable gas exploration in the past has yielded no producing wells or known reserves in these areas.

Cow Creek and Antelope Creeks are different from other wilderness recommendations of the Great Plains Shortgrass Prairie, particularly the CMR, in that the river here is not lapping at lake shores. The sandstone cliffs are not flooded and help to make these areas so spectacular and of high quality for diversity in the wilderness preservation system. From within the Cow Creek WSA, the Woodhawk WSA is often in view, and the river in between greatly expands the experience of vastness.

J I have never been to the two WSAs along the Musselshell River. It seems that possible restrictions on needed range developments were a main reason for the no wilderness recommendation. Buried pipelines are rated has having only a moderate resulting impact level in Class I Visual Resource Management Areas. Therefore these pipelines should be compatible with a wilderness designation. These areas as wilderness would be important as security areas for wildlife. Oil and gas potential in these areas is low to moderate and presents no great conflict or loss in these small areas.

K I strongly support the wilderness recommendation for segments A and B in Seven Blackfoot WSA as tack ons to CMR Wilderness Area. This rugged, disected, domed maze is a wonderful country. However, segment C is just as unique and amazing. This 11,450 acres can stand on its own merits and deserves your wilderness recommendation. The study has shown that only limited impact would occur to livestock management in this area, with few new facilities proposed. Also, with only a moderate natural gas potential, a minimal impact would result from wilderness designation. If the state section was exchanged, a high quality, manageable wilderness area could be preserved and would compliment nearby wilderness proposals. In my evaluation of this whole study, segment C of Seven Blackfoot rates very high in deserving a wilderness recommendation, perhaps only behind Woodhawk in the best of areas not recommended.

I support a wilderness designation for Segment A of the Billy Creek WSA, partial wilderness Alternative 1. I have been into the Burnt Lodge WSA and agree with all the good things the study notes about the fine wilderness qualities of this area. I support the wilderness recommendation for Burnt Lodge and the Terry Badlands and am pleased to hear there is some local support for these proposals.

I still fail to totally understand or accept the intense opposition to wilderness expressed by most ranchers in the Breaks. Like the EIS states, any loss of loan value on ranches containing BLM grazing permits in wilderness should be short term. After a few years without a change in livestock use levels, lenders would again value these grazing permits. And I would think most ranches would not want every sightseer, bureaucrat, and hunter running up and down a maze of roads left open behind gas exploration. For most, horses are still the best way to manage livestock in rugged breaks country.

Pit reservoirs, spillways, etc., that need periodic maintenence but are located in spots hard to reach with machinery, such as the pit reservoir near the mouth of Winter Creek, could be maintained very well by using draft horses. This isn't just a far out idea. Our grandparents built enduring structures with horses. The Lewistown area has plenty of draft horse breeders. Such an approach may take more time, but would probably cost no more than drag lines, for example. Consider this for limited applications in sensitive areas. The temporary impacts to wilderness would be reduced and water facility maintained. It might even be fun.

Perhaps the hardest to understand is the negative long-term view of wilderness by ranchers. What more could they want than an act by Congress guaranteeing them native forage in perpetuity and guaranteeing their grazing rights and support facilities? That's better than most grazing permits. I can imagine a scenario where continued attempts are made to sell off public lands and where many ranches could not successfully buy their public grazing rights. Imagine the Breaks bought up for large private hunting clubs!

By not accepting Wilderness as a compatible land management tool, ranches may go through some new, undreamed of worse study in a decade or so. Times change.

Anything can happen. My Mom gave me a bunch of newspaper clippings she saved from 1963. They were reports on hearings held that spring in Lewistown, Havre, and Malta on Missouri River development; plans to develop 200 miles of Missouri River to provide a million kilowatts of hydro-electric power and recreation and wilderness parks. It's interesting to read about who was for development and who was against any kind of progress then. Times change.

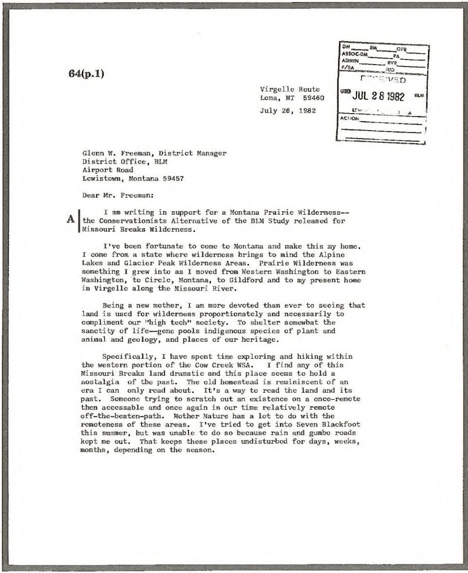
The last three and a half years have selected new prairie wilderness area candidates, areas that may be freed from many of the accelerated changes of our time. Just the cream of the public land, but areas worthy of our human defense and pride.

Please consider my comments and make them part of the public record. Thank you.

Very sincerely,

Jerry Berner

Jerry Berner, Chairman
Missouri Breaks Protective Association



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ACTION ____

Virgelle Route
Loma, MT 59460

July 26, 1982

Glenn W. Freeman, District Manager
District Office, BLM
Airport Road
Lewistown, Montana 59457

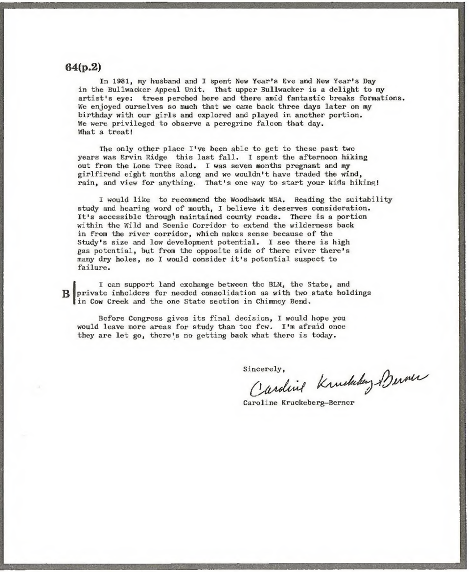
Dear Mr. Freeman:

A I am writing in support for a Montana Prairie Wilderness--the Conservationists Alternative of the BLM Study released for Missouri Breaks Wilderness.

I've been fortunate to come to Montana and make this my home. I come from a state where wilderness brings to mind the Alpine Lakes and Glacier Peak Wilderness Areas. Prairie Wilderness was something I grew into as I moved from Western Washington to Eastern Washington, to Circle, Montana, to Gildford and to my present home in Virgelle along the Missouri River.

Being a new mother, I am more devoted than ever to seeing that land is used for wilderness proportionately and necessarily to compliment our "high tech" society. To shelter somewhat the sanctity of life--gene pools indigenous species of plant and animal and geology, and places of our heritage.

Specifically, I have spent time exploring and hiking within the western portion of the Cow Creek WSA. I find any of this Missouri Breaks land dramatic and this place seems to hold a nostalgia of the past. The old homestead is reminiscent of an era I can only read about. It's a way to read the land and its past. Someone trying to scratch out an existence on a once-remote then accessable and once again in our time relatively remote off-the-beaten-path. Mother Nature has a lot to do with the remoteness of these areas. I've tried to get into Seven Blackfoot this summer, but was unable to do so because rain and gumbo roads kept me out. That keeps these places undisturbed for days, weeks, months, depending on the season.



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In 1981, my husband and I spent New Year's Eve and New Year's Day in the Bullwacker Appeal Unit. That upper Bullwacker is a delight to my artist's eye: trees perched here and there amid fantastic breaks formations. We enjoyed ourselves so much that we came back three days later on my birthday with our girls and explored and played in another portion. We were privileged to observe a peregrine falcon that day. What a treat!

The only other place I've been able to get to these past two years was Ervin Ridge this last fall. I spent the afternoon hiking out from the Lone Tree Road. I was seven months pregnant and my girlfirend eight months along and we wouldn't have traded the wind, rain, and view for anything. That's one way to start your kids hiking!

I would like to recommend the Woodhawk WSA. Reading the suitability study and hearing word of mouth, I believe it deserves consideration. It's accessible through maintained county roads. There is a portion within the Wild and Scenic Corridor to extend the wilderness back in from the river corridor, which makes sense because of the Study's size and low development potential. I see there is high gas potential, but from the opposite side of there river there's many dry holes, so I would consider it's potential suspect to failure.

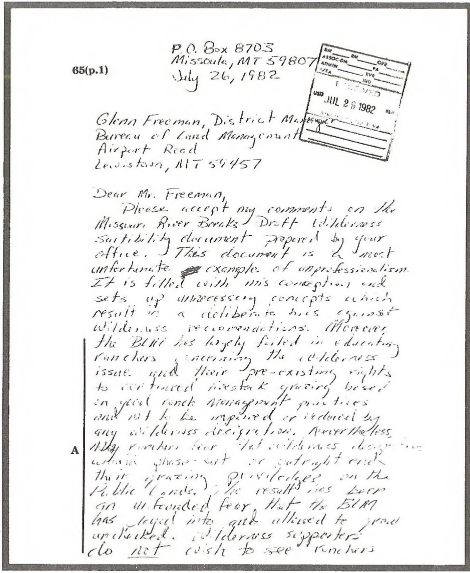
B I can support land exchange between the BLM, the State, and private inholders for needed consolidation as with two state holdings in Cow Creek and the one State section in Chimney Bend.

Before Congress gives its final decision, I would hope you would leave more areas for study than too few. I'm afraid once they are let go, there's no getting back what there is today.

Sincerely,

Caroline Kruckeberg-Berner

Caroline Kruckeberg-Berner



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P.O. Box 8703
Missoula, MT 59807
July 26, 1982

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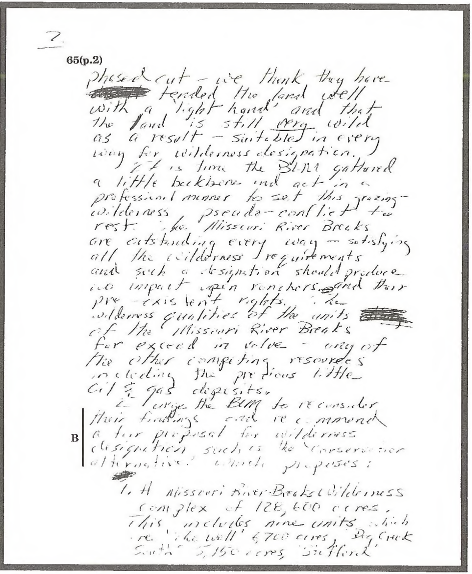
Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewistown, MT 59457

Dear Mr. Freeman,

Please accept my comments on the Missouri River Breaks Draft Wilderness Suitability document prepared by your office. This document is a most unfortunate example of unprofessionalism. It is filled with misconception and sets up unnecessary concepts which result in a deliberate bias against wilderness recommendations. Moreover

A the BLM has largely failed in educating ranchers concerning the wilderness issue and their pre-existing rights to continued livestock grazing based on good ranch management practices and not to be impaired or reduced by any wilderness designation. Nevertheless, Many ranchers fear that wilderness designation would phase-out or outright end their grazing priviledges on the Public Lands. The result has been an unfounded fear that the BLM has played into and allowed to grow unchecked. Wilderness supporters do not wish to see ranchers



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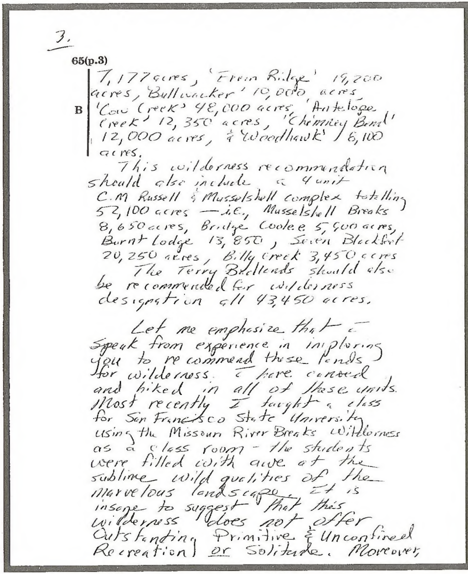
phased out - we think they have tended the land well with a 'light hand' and that the land is still very wild as a result - suitable in every way for wilderness designation.

It is time the BLM gathered a little backbone and act in a professional manner to set this grazing-wilderness pseudo-conflict to rest. The Missouri River Breaks are outstanding every way - satisfying all the wilderness requirements and such a designation should produce no impact upon ranchers and their pre-existent rights. The wilderness qualities of the units of the Missouri River Breaks far exceed in value - any of the other competing resources including the precious little oil & gas deposits.

I urge the BLM to reconsider

B their findings and recommend a fair proposal for wilderness designation such as the 'Conservation alternative' which proposes:

1. A Missouri River Breaks Wilderness complex of 128,600 acres. This includes nine units which are: 'The Wall' 6,700 acres, 'Dog Creek South' 5,150 acres, 'Stafford'



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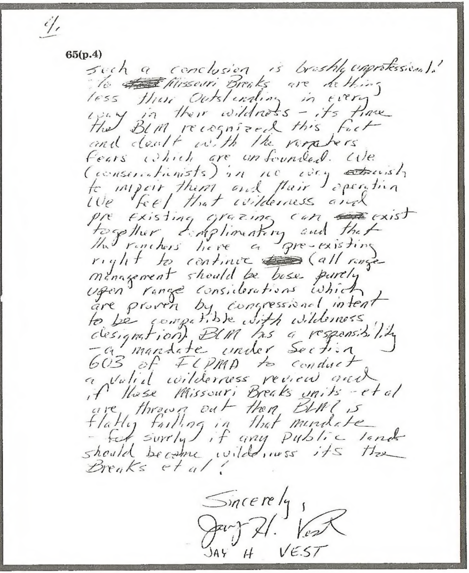
B 7,177 acres, 'Erwin Ridge' 19,200 acres, 'Bullwacker' 10,000 acres, 'Cow Creek' 48,000 acres, 'Antelope Creek' 12,350 acres, 'Chimney Bend' 12,000 acres, & 'Woodhawk' 8,100 acres.

This wilderness recommendation should also include a 4 unit C.M Russell & Musselshell complex totalling 52,100 acres — i.e., Musselshell Breaks 8,650 acres, Bridge Coolee 5,900 acres, Burnt Lodge 13,850, Seven Blackfoot 20,250 acres, Billy Creek 3,450 acres.

The Terry Badlands should also be recommended for wilderness designation all 43,450 acres.

Let me emphasize that I speak from experience in imploring you to recommend these lands for wilderness. I have canoed and hiked in all of these units. Most recently I taught a class for San Francisco State University using the Missouri River Breaks Wilderness as a class room - the students were filled with awe at the sublime wild qualities of the marvelous landscape. It is insane to suggest that this wilderness does not offer Outstanding Primitive & Unconfined Recreation) or Solitude. Moreover,



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such a conclusion is brashly unprofessional! The Missouri Breaks are nothing less than Outstanding in every way in their wildness - its time the BLM recognized this fact and dealt with the ranchers fears which are unfounded. We (conservationists) in no way wish to impair them and their operation. We feel that wilderness and pre existing grazing can exist together complimentary and that the ranchers have a pre-existing right to continue (all range management should be base purely upon range considerations which are proven by congressional intent to be compatible with wilderness designation). BLM has a responsibility - a mandate under Section 603 of FLPMA to conduct a valid wilderness review and if these Missouri Breaks units - et al are thrown out then BLM is flatly failing in that mandate - for surely if any public land should become wilderness its the Breaks et al!

Sincerely,

Jay H. Vest

JAY H VEST

66

Dear Sirs,

Regarding the Missouri River Breaks'fate, plese count my name in support of conserving it. Wilderness designation won't evict current cattle grazers, yet it would preserve the area's integrety as a truly wild place. Machinery destroys. Noise and pollution mean that humans have claimed it, and wilderness boundary lines become less meaningful. than lines on paper.

One other thing; hearing today that today is the last day for the "public" to comment on this topic, I must make it brief. Could you make more mention of deadlines in the future?

thanks,

Rick Nesh

ADMIN
JUL 2
ACTION

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SQUARE BUTTE GRAZING ASSOCIATION
Malta. Montana 59538

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LEWISTOWN, MONTANA
ACTION

21 June

Glen W. Freeman
District Manager
District Office BLM
Lewistown, Montana

Dear Mr. Freeman

I am writing for Square Butte Grazing Association (which includes 25 members) in objection to making Cow Creek Unit No. MT. 060-256 into wilderness. This area has been used for livestock production since homestead days, and for the past 11 years by Square Butte Grazing Association ranchers. The grazing unit was established in cooperation with several Federal agencies including the BLM. By setting ths grazing unit up, additional fences and water developments had to be constructed with vehicle roads traversing the area. These improvements affect the naturalness of the area.

The unit has been used primary for livestock grazing and hunting since homestead days. It does not appsar in its natural state because included within this area are 28.5 miles of vehicle roads; 6 miles of good steel fence; 14 man made dams, 9 of which are in good shape; two stock pits, one in Squaw Creek and one in Cabin Coulee; 6 oil and gas wells, (around each well thsre has been a lot of heavy equipment work done; such as the roads made to the drill site and the leveling of the drilling aress by large caterpillars and road graders); 15 roads (which means you can travel on them with a pickup and horse trailer and in many cases a car). Most have deep tirs marks because of the years of vehicle travel on them; a number of developed springs; old homesteads, and old abandoned fences from the homestead days.

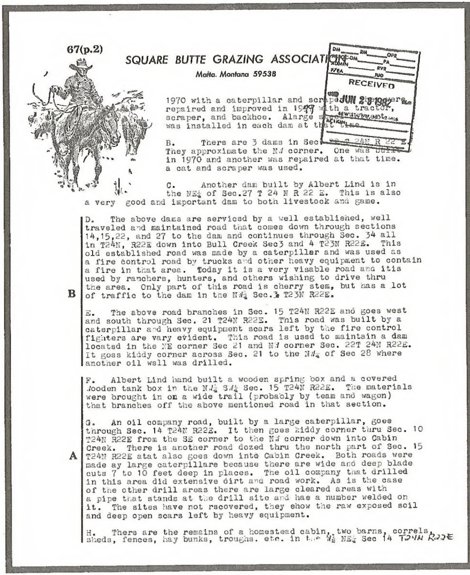
Some specific reasons why we object to this unit being classified as wilderness ars:

A

1. It is not wilderness! Man has lived in and left his mark in the area for at least 80 years. The reservoirs, the springs, the fences, the old homestsads, the roads, the impact created by gas and oil exploration and livestock managsment give the area the appearance as it is; modern day ranch country. The ranchers manage this area as do ranchers in any othsr part of livestock country, with pickups, horsetrailers, trucks, tractors, backhoes, caterpillars, horses, and airplanes.

Further evidence that the area is not wildernsss is:

A. Two dams were built in the NW¼, NW¼ Sec. 14 T14N R22E about



67(p.2)

SQUARE BUTTE GRAZING ASSOCIATION
Malta. Montana 59538

1970 with a caterpillar and scraped. They were repaired and improved in 1977 with a tractor, scraper, and backhoe. Alarge steel [illegible] was installed in each dam at that time.

B. Thers are 3 dams in Sec. 22 T 24N R 22 E. They approximate the NW corner. One was built in 1970 and another was repaired at that time. a cat and scraper was used.

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C. Another dam built by Albert Lind is in the NE¼ of Sec.27 T 24 N R 22 E. This is also a very good and important dam to both livestock and game.

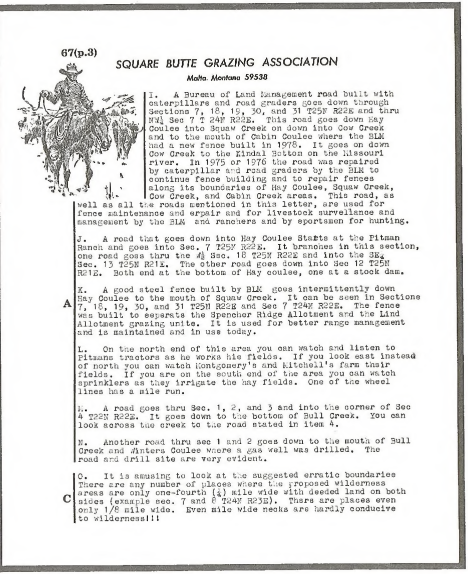
B D. The above dams are servicsd by a well established, well traveled and maintained road that comes down through sections 14,15,22, and 27 to the dam and continues through Sec. 34 all in T24N, R22E down into Bull Creek Sec3 and 4 T23N R22E. This old established road was made by a caterpillar and was used as a fire control road by trucks and other heavy equipment to contain a fire in that area. Today it is a very visable road and itis used by ranchers, hunters, and others wishing to drive thru the area. Only part of this road is cherry stem, but has a lot of traffic to the dam in the NW¼ Sec.3 T23N R22E.

E. The above road branches in Sec. 15 T24N R22E and goes west and south through Sec. 21 T24N R22E. This road was built by a caterpillar and heavy equipment scars left by the fire control fighters are vary evident. This road is ussd to maintain a dam locatsd in the NE corner Sec 21 and NW corner Sec. 22T 24N R22E. It goss kiddy corner across Sec. 21 to the NW¼ of Sec 28 where another oil wsll was drilled.

A F. Albert Lind hand built a wooden spring box and a covered Wooden tank box in the NW¼ SW¼ Sec. 15 T24N R22E. The materials were brought in on a wide trail (probably by team and wagon) that branches off the above mentioned road in that section.

G. An oil company road, built by a large caterpillar, goee through Sec. 14 T24N R22E. It then goes kiddy corner thru Sec. 10 T24N R22E from the SE corner to the NW corner down into Cabin Creek. There is another road dozed thru the north part of Sec. 15 T24N R22E atat also goes down into Cabin Creek. Both roads were made ay large caterpillare because there are wide and deep blade cuts 7 to 10 feet deep in places. The oil company that drilled in this area did extensive dirt and road work. As is the case of the other drill areas there are large cleared areas with a pipe that stands at the drill site and has a number welded on it. The sites have not rscovered, they ehow the raw exposed soil and deep open scars left by heavy equipment.

H. Thers are the remains of a homestead cabin, two barns, correls, sheds, fences, hay bunks, troughs. etc. in the W½ NE¼ Sec 14 T24N R22E



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SQUARE BUTTE GRAZING ASSOCIATION
Malta. Montana 59538

I. A Bureau of Land Management road built with caterpillare and road graders goes down through Sections 7, 18, 19, 30, and 31 T25N R22E and thru NW¼ Sec 7 T 24N R22E. This road goes down Hay Coulee into Squaw Creek on down into Cow Creek and to the mouth of Cabin Coulee whers the BLM had a new fence built in 1978. It goes on down Cow Creek to the Kindal Bottom on the Missouri river. In 1975 or 1976 the road was repaired by caterpillar and road graders by the BLM to continue fence building and to repair fences along its boundaries of Hay Coulee, Squaw Creek, Cow Creek, and Cabin Creek areas. This road, as well as all the roads mentioned in this letter, are used for fence maintenance and erpair and for livestock surveliance and management by the BLM and ranchers and by eportsmen for hunting.

J. A road that goes down into Hay Coulee Statts at the Pitman Ranch and goes into Sec. 7 T25N R22E. It branches in this section, one road goss thru the W½ Ssc. 18 T25N R22E and into the SE¼ Sec. 13 T25N R21E. The other road goes down into Sec 12 T25N R21E. Both end at the bottom of Hay coulee, one at a stock dam.

A K. A good steel fence built by BLM goes intermittently down Hay Coulee to the mouth of Squaw Creek. It can be seen in Sectione 7, 18, 19, 30, and 31 T25N R22E and Sec 7 T24N R22E. The fence was built to eeperats the Spencher Ridge Allotment and the Lind Allotment grazing unite. It is used for better range management and is maintained and in use today.

L. On the north end of thie area you can watch and listen to Pitmans tractors as he works hie fields. If you look east instead of north you can watch Montgomery's and Mitchell's farm thsir fields. If you are on the eouth end of the area you can watch sprinklers as they irrigate the hay fields. One of the wheel lines has a mile run.

M. A road goes thru Sec. 1, 2, and 3 and into the corner of Sec 4 T22N R22E. It goes down to the bottom of Bull Creek. You can look across the creek to the road stated in item 4.

N. Another road thru sec 1 and 2 goes down to the mouth of Bull Creek and Winters Coulee where a gas well was drilled. The road and drill site are very evident.

C O. It is amusing to look at the suggested erratic boundariee There are any number of places where the proposed wilderness areas are only one-fourth (¼) mile wide with deeded land on both sides (example sec. 7 and 8 T24N R23E). Thsrs are places even only 1/8 mile wide. Even mile wide necks are hardly conducive to wilderness!!!

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SQUARE BUTTE GRAZING ASSOCIATION
Malta, Montana 59538

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In summary we can say that people have lived in this area for over 80 years. We still live in and around and use the area. It is managed just the same as any other modern ranch, using modern equipment and management practices. It is not wilderness and hasn't been wilderness in your or my lifetime. We respectively ask that you do not make a wilderness area of Cow-Creek Unit NO. Mt. 060-256.

Sincerely

Russell Lafond

Russell Lafond
Secretary
Square Butte Grazing Association
Malta, Montana

68(p.1)

20 miles N. E. of Winifred, Mont.

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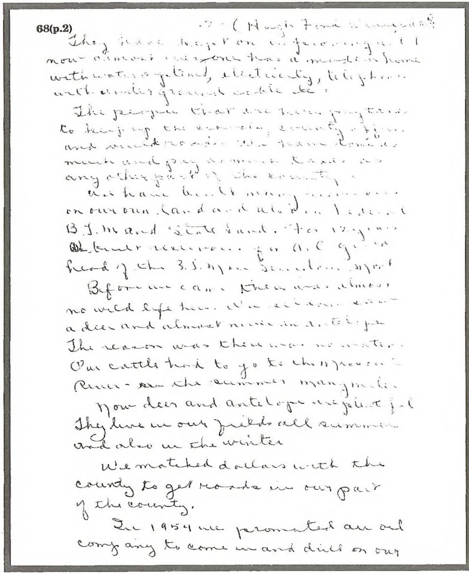
I, Hugh Ford came to Montana in 1915 and have now been here 67 years. Bernice Hess Ford came here in 1916. We were married in 1923.

When we came here there were very few people here. There were no real roads, no fences, no culverts or bridges. We crossed coulees anywhere we could.

People came in the next few years and took up homesteads until there was someone on every 320. They built little cabins, a few fences, plowed enough to prove up on, took loans and left for good. They couldn't live this way.

We had no mail service, telephone, electricity, no way to communicate and especially no water. It had to be hauled miles in most cases.

Then the few people that did stay acquired the deserted places from the loan companies. They fenced fields and slowly developed a good system of dry land farming until they could raise grain and hay to feed the cattle in the winter which was necessary for their survival. They built better homes, fenced the land, built many reservoirs



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-2- (Hugh Ford [illegible]

They have kept on improving until now almost everyone has a modern home with water system, electricity, telephone with under ground cable etc.

The people that are here pay taxes to keep up the schools, county offices and roads. We have done as much and pay as much taxes as any other part of the county.

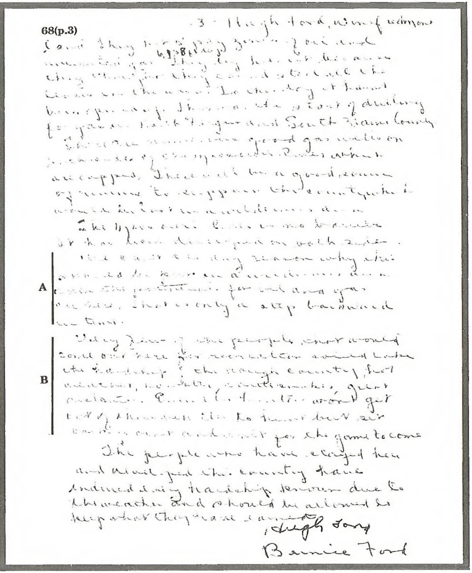
We have built many reservoirs on our own land and also on Federal B.L.M and State land. For 12 years we built reservoirs for A.C. [illegible] head of the B.L.M. [illegible]

Before we came there was almost no wild life here. We seldom saw a deer and almost never an antelope. The reason was there was no water. Our cattle had to go to the Yampa River - in the summer many miles.

Now deer and antelope are plentiful. They live in our fields all summer and also in the winter

We matched dollars with the county to get roads in our part of the county.

In 1954 we promoted an oil company to come in and drill on our



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-3- Hugh Ford, [illegible]

land. They hit a big zone of oil and [illegible] gas. [illegible] they could [illegible] all the [illegible] in the area. [illegible] There was the start of drilling for years in North Yampa and South [illegible] County

There are many good gas wells on both sides of the Yampa River which are capped. There will be a good source of revenue to support the county which would be lost in a wilderness area.

The Yampa River is no barrier it has been developed on both sides.

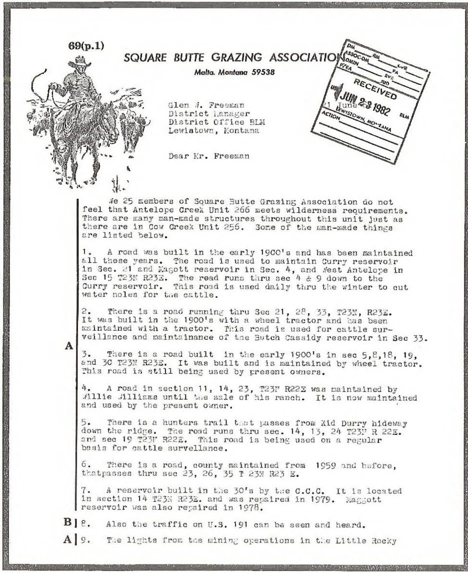
A We can't see any reason why this should be put in a wilderness area [illegible] the potential for oil and gas out here. That is only a step backward in time.

B Very few of the people that would come out here for recreation would take the hardship of the rough country, hot weather, no water, rattlesnakes, great distances. [illegible] won't get out of their [illegible] to hunt but sit [illegible] and wait for the game to come

The people who have stayed here and developed this country have endured every hardship known due to the weather and should be allowed to keep what they have earned.

Hugh Ford

Bernice Ford



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SQUARE BUTTE GRAZING ASSOCIATION
Malta, Montana 59538

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USDI JUN 23 1982 BLM
LEWISTOWN, MONTANA
ACTION

21 June

Glen W. Freeman
District Manager
District Office BLM
Lewistown, Montana

Dear Mr. Freeman

We 25 members of Square Butte Grazing Association do not feel that Antelope Creek Unit 266 meets wilderness requirements. There are many man-made structures throughout this unit just as there are in Cow Creek Unit 256. Some of the man-made things are listed below.

1. A road was built in the early 1900's and has been maintained all these years. The road is used to maintain Curry reservoir in Sec. 21 and Magott reservoir in Sec. 4, and West Antelope in Sec 15 T23N R23E. The road runs thru sec 4 & 9 down to the Curry reservoir. This road is used daily thru the winter to cut water holes for the cattle.

2. There is a road running thru Sec 21, 28, 33, T23N, R23E. It was built in the 1900's with a wheel tractor and has been maintained with a tractor. This road is used for cattle surveillance and maintainance of the Butch Cassidy reservoir in Sec 33.

A

3. There is a road built in the early 1900's in sec 5,8,18, 19, and 30 T23N R23E. It was built and is maintained by wheel tractor. This road is still being used by present owners.

4. A road in section 11, 14, 23, T23N R22E was maintained by Willie Williams until the sale of his ranch. It is now maintained and used by the present owner.

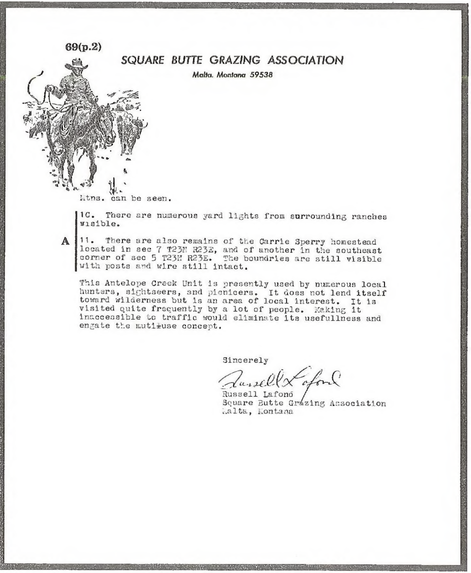
5. There is a hunters trail that passes from Kid Durry hideway down the ridge. The road runs thru sec. 14, 13, 24 T23N R 22E. and sec 19 T23N R22E. This road is being used on a regular basis for cattle survellance.

6. There is a road, county maintained from 1959 and before, thatpasses thru sec 23, 26, 35 T 23N R23 E.

7. A reservoir built in the 30's by the C.C.C. It is located in section 14 T23N R23E. and was repaired in 1979. Maggott reservoir was also repaired in 1978.

B | 8. Also the traffic on U.S. 191 can be seen and heard.

A | 9. The lights from the mining operations in the Little Rocky



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SQUARE BUTTE GRAZING ASSOCIATION
Malta, Montana 59538

Mtns. can be seen.

10. There are numerous yard lights from surrounding ranches visible.

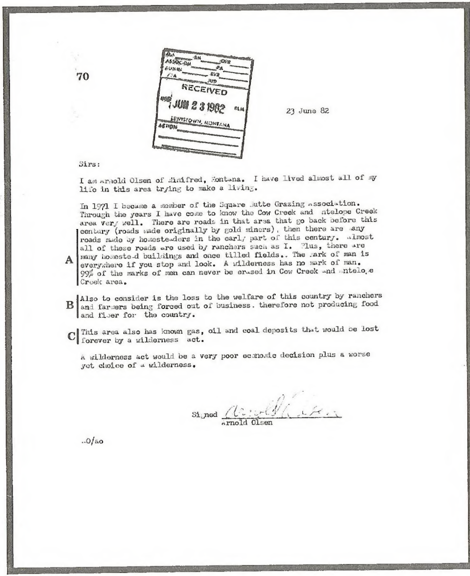
A

11. There are also remains of the Carrie Sperry homestead located in sec 7 T23N R23E, and of another in the southeast corner of sec 5 T23N R23E. The boundries are still visible with posts and wire still intact.

This Antelope Creek Unit is presently used by numerous local hunters, sightseers, and picnicers. It does not lend itself toward wilderness but is an area of local interest. It is visited quite frequently by a lot of people. Making it inaccessible to traffic would eliminate its usefullness and engate the mutiluse concept.

Sincerely

Russell Lafond
Russell Lafond
Square Butte Grazing Association
Malta, Montana



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LEWISTOWN, MONTANA
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23 June 82

Sirs:

I am Arnold Olsen of Winifred, Montana. I have lived almost all of my life in this area trying to make a living.

In 1971 I became a member of the Square Butte Grazing Association. Through the years I have come to know the Cow Creek and Antelope Creek area very well. There are roads in that area that go back before this century (roads made originally by gold miners), then there are many roads made by homesteaders in the early part of this century. Almost all of these roads are used by ranchers such as I. Plus, there are many homestead buildings and once tilled fields.. The mark of man is everywhere if you stop and look. A wilderness has no mark of man. 99% of the marks of men can never be erased in Cow Creek and Antelope Creek area.

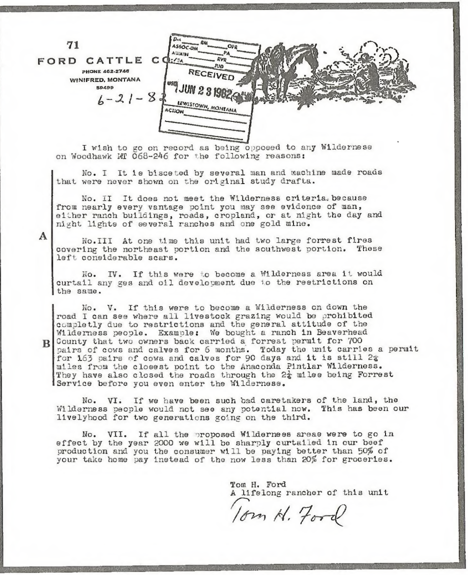
B Also to consider is the loss to the welfare of this country by ranchers and farmers being forced out of business. therefore not producing food and fiber for the country.

C This area also has known gas, oil and coal deposits that would be lost forever by a wilderness act.

A wilderness act would be a very poor economic decision plus a worse yet choice of a wilderness.

Signed
Arnold Olsen

AO/ao



71

FORD CATTLE CO.
PHONE 462-2746
WINIFRED, MONTANA
59499

DM ___ RM ___ OPR ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
EA ___ JUD ___
RECEIVED
USDI JUN 23 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

6-21-82

I wish to go on record as being opposed to any Wilderness on Woodhawk MT 068-246 for the following reasons:

A

No. I It is bisceted by several man and machine made roads that were never shown on the original study drafts.

No. II It does not meet the Wilderness criteria, because from nearly every vantage point you may see evidence of man, either ranch buildings, roads, cropland, or at night the day and night lights of several ranches and one gold mine.

No.III At one time this unit had two large forrest fires covering the northeast portion and the southwest portion. These left considerable scars.

No. IV. If this were to become a Wilderness area it would curtail any gas and oil development due to the restrictions on the same.

B

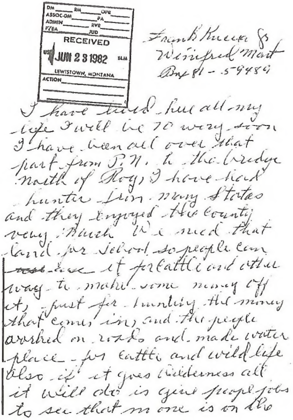
No. V. If this were to become a Wilderness on down the road I can see where all livestock grazing would be prohibited completly due to restrictions and the general attitude of the Wilderness people. Example: We bought a ranch in Beaverhead County that two owners back carried a forrest permit for 700 pairs of cows and calves for 6 months. Today the unit carries a permit for 163 pairs of cows and calves for 90 days and it is still 2½ miles from the closest point to the Anaconda Pintlar Wilderness. They have also closed the roads through the 2½ miles being Forrest Service before you even enter the Wilderness.

No. VI. If we have been such bad caretakers of the land, the Wilderness people would not see any potential now. This has been our livelyhood for two generations going on the third.

No. VII. If all the proposed Wilderness areas were to go in effect by the year 2000 we will be sharply curtailed in our beef production and you the consumer will be paying better than 50% of your take home pay instead of the now less than 20% for groceries.

Tom H. Ford
A lifelong rancher of this unit
Tom H. Ford

72(p.1)



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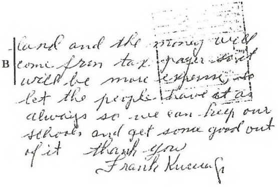
RECEIVED
US JUN 23 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

Frank Kucera Sr
Winifred Mont
Box 81 - 59489

I have lived here all my
life I will be 70 very soon
I have been all over that
part from P.N. to the bridge
north of Roy, I have had
hunter from many States
and they enjoyed this county
very much We need that
land for school so people can
~~not~~ use it for cattle and other
way to make some money off
A it, just for hunting the money
that comes in, and the people
worked on roads and made water
place for cattle and wild life
also if it goes Wilderness all
B it will do is give people jobs
to see that no one is on the

72(p.2)



land and the money will
B come from tax payer and it
will be more expense to
let the people have it as
always so we can keep our
schools and get some good out
of it thank you
Frank Kucera Sr

Comment: Wilderness Designation for portions of
Cow Creek and Antelope Creek WSAs

DM ___ RM ___ OPR ___
ASSOC-DM ___ PA ___
ADMIN ___ RVR ___
P/EA ___ JUD ___
RECEIVED
JUN 23 1982 BLM
LEWISTOWN, MONTANA
ACTION ___

73(p.1)

I have been farming and ranching in the Chimney Bend area 13 niles north of Winifred since 1942.

In those years I have seen this country improve considerably through cooperation of the ranchers and the BLM. Water, fences, roads and hard work have been the key to better range and wild life management and there have been many instances where these have been implemented to the benefit of the land.

A In the Cow Creek and Antelope Creek WSA there are 25 reservoirs and one spring development watering the area, there are 41 vehicle ways totaling 35 miles and 11 miles of cherry stem roads that service the Cow Creek WSA and Antelope Creek WSA enabling government officials and ranchers to traverse the area for the better range and wild life management. These roads and trails also serve a great many hunters and sightseers allowing them to enjoy and benefit from the great country. Without these roads, access would be denied to all but a few who could go by horseback or walk the many miles.

B Solitude plays a big factor in establishing a wilderness. In Cow or Antelope Creek a person would be hard pressed to find very many places where this condition exists. Solitude is affected by a great many things in approximately 75% of the land in question. There are within the units 35 miles of vehicle ways, 11 miles of cherry stem roads, 25 reservoirs, one developed spring, 17½ miles of fencing, 7 dry gas wells, 1 mile of power line and one water well.

On perimeter and within sight and sound, there are farming and ranching activities, Landusky mining, other recreation areas, and a National Guard training zone with 8 daily flights under 4000 feet providing a very noisy distraction--and they call this solitude!

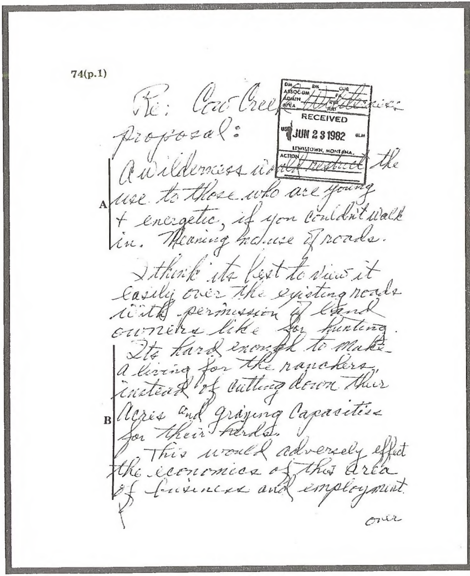
C Oil and gas exploration possibilities should be studied very closely before a decision is made to establish a wilderness in any of the WSAs. All the WSA units from Dog Creek South to Antelope and Cow Creek have a 51.1% pre FLPMA lease. This enables oil drilling companies to set up and drill wherever they chose as the most productive area. Therefore I feel this could have a very drastic impact on the suitability of the area for wilderness.

73(p.2)

C This land has been in multiple use since the days of the homesteader and very little change has occurred. To leave this land in multiple use will, in the future, cause very little change. Therefore I say let it remain as it has been.

Gerald Bergum
Winfred, Mt.

74(p.1)



Re: Cow Creek Wilderness proposal:

A A wilderness would restrict the use to those who are young + energetic, if you couldn't walk in. Meaning no use of roads.

DM ___ BM ___ OIR ___
ASSOC-DM ___ PA ___
ADMIN ___ RWR ___
AREA ___ JUD ___
RECEIVED
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LEWISTOWN, MONTANA
ACTION

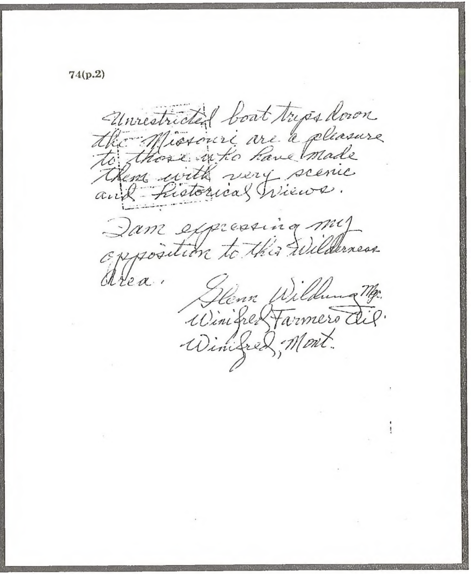
I think its best to view it easily over the existing roads with permission of land owners like for hunting.

B Its hard enough to make a living for the ranchers, instead of cutting down their Acres and grazing Capacities for their herds.

This would adversely effect the economics of this area of business and employment.

over

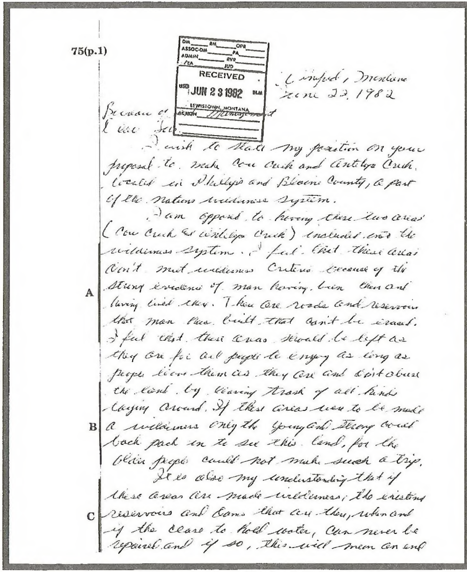
74(p.2)



Unrestricted boat trips down the Missouri are a pleasure to those who have made them with very scenic and historical views.

I am expressing my opposition to this Wilderness Area.

Glenn Willdung Mgr.
Winifred Farmers Oil
Winifred, Mont.



75(p.1)

DM RM OPR
ASSOC-DM PA
ADMIN RVR
SEA JUD
RECEIVED
USD JUN 23 1982 BLM
LEWISTOWN, MONTANA
ACTION

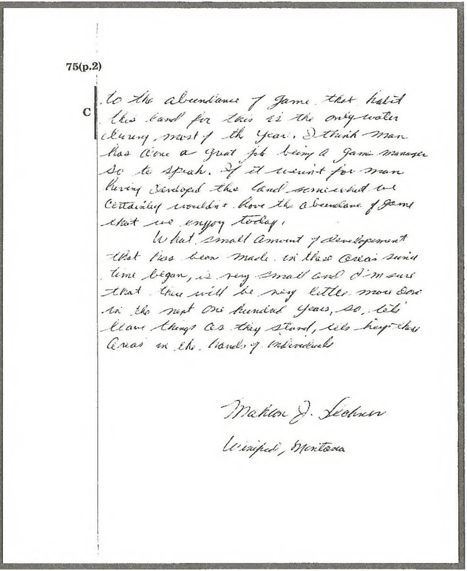
Winifred, Montana
June 22, 1982

Bureau of Land Management
Dear Sir.

I wish to state my position on your
proposal to make Cow Creek and Antelope Creek,
located in Phillips and Blaine County, a part
of the Nations wilderness system.

I am opposed to having these two areas
(Cow Creek & Antelope Creek) included into the
wilderness system. I feel that these areas
don't meet wilderness criteria because of the
A strong evidence of man having been there and
having lived there. There are roads and reservoirs
that man has built that can't be erased.
I feel that these areas should be left as
they are for all people to enjoy as long as
people leave them as they are and don't abuse
the land by leaving trash of all kinds
laying around. If these areas were to be made
B a wilderness only the young and strong could
back pack in to see this land, for the
older people could not make such a trip.

It is also my understanding that if
these areas are made wilderness, the existing
C reservoirs and dams that are there, when and
if they cease to hold water, can never be
repaired and if so, this will mean an end

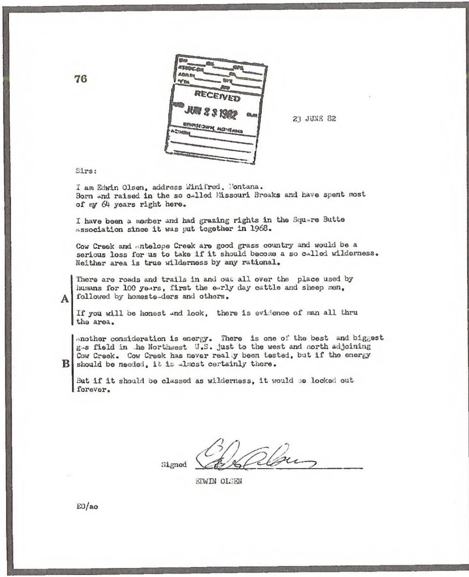


75(p.2)

to the abundance of game that habit
C this land for this is the only water
during most of the year. I think man
has done a great job being a game manager
so to speak. If it weren't for man
having developed this land somewhat we
certainly wouldn't have the abundance of game
that we enjoy today.

What small amount of developement
that has been made in these areas since
time began, is very small and I'm sure
that there will be very little more done
in the next one hundred years, so, lets
leave things as they stand, lets keep these
areas in the hands of individuals

Mahlon J. Lechner
Winifred, Montana



76

RECEIVED
JUN 23 1982
LEWISTOWN, MONTANA
ACTION

23 JUNE 82

Sirs:

I am Edwin Olsen, address Winifred, Montana.
Born and raised in the so called Missouri Breaks and have spent most of my 64 years right here.

I have been a member and had grazing rights in the Square Butte association since it was put together in 1968.

Cow Creek and Antelope Creek are good grass country and would be a serious loss for us to take if it should become a so called wilderness. Neither area is true wilderness by any rational.

A There are roads and trails in and out all over the place used by humans for 100 years, first the early day cattle and sheep men, followed by homesteaders and others.

If you will be honest and look, there is evidence of man all thru the area.

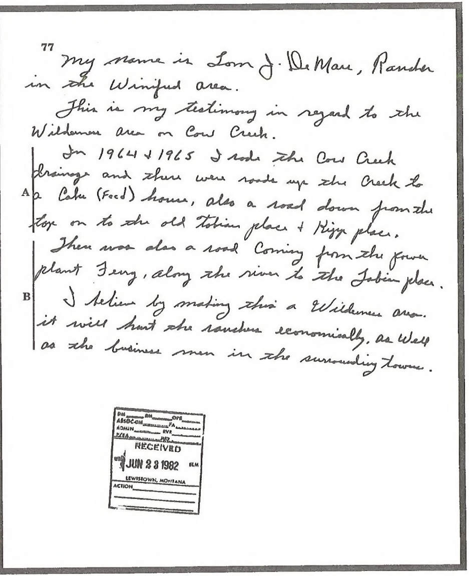
B Another consideration is energy. There is one of the best and biggest gas field in the Northwest U.S. just to the west and north adjoining Cow Creek. Cow Creek has never really been tested, but if the energy should be needed, it is almost certainly there.

But if it should be classed as wilderness, it would be locked out forever.

Signed

EDWIN OLSEN

EO/ao



77

My name is Tom J. DeMare, Rancher in the Winifred area.

This is my testimony in regard to the Wilderness area on Cow Creek.

A In 1964 + 1965 I rode the Cow Creek drainage and there were roads up the Creek to a Cake (Feed) house, also a road down from the top on to the old Tobin place + Kipp place.

B There was also a road Coming from the power plant Ferry, along the river to the Tobin place.

I believe by making this a Wilderness area. it will hurt the ranchers economically. as Well as the business men in the surrounding towns.

DM AM OPR
ASSOCOM FA
ADMIN RVR
P/EA WD
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LEWISTOWN, MONTANA
ACTION

78

MONTANA
MAGAZINE
P.O. Box 5630 • 2220 N. COOKE, HELENA, MT 59604 • Phone 406/443-2842

Statement to the Bureau of Land Management

A I wish to go on record supporting the conservation alternative consisting of 209,000 acres of wilderness for the Missouri River Breaks, the C.M. Russell Wildlife Refuge, the Musselshell, the Terry Badlands and wilderness in the Dillon Resource area.

I spend quite a bit of time in almost all these regions doing photography work and pleasure trekking. All of these areas are deserving of wilderness. Given today's precarious economic situations, wilderness is a great asset to the state of Montana to help attract tourists and fuel our fast growing outdoor recreation interests.

Submitted by

Rick Graetz
Rick Graetz
Publisher

RG/pb

DM___ RM___ OPR___
ASSOC-DM___ PA___
ADMIN___ RVR___
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RECEIVED
JUN 24 1982
LEWISTOWN, MONTANA
ACTION___

79

920 Breckenridge
Helena, MT 59601
June 24, 1982

DM___ RM___ OPR___
ASSOC-DM___ PA___
ADMIN___ RVR___
P/EA___ JUD___
RECEIVED
JUN 24 1982 BLM
LEWISTOWN, MONTANA
ACTION___

Glenn Freeman, District Manager
Bureau of Land Management
Airport Road
Lewiston, MT 59457

Dear Mr. Freeman:

Please enter these comments in the official BLM Wilderness hearing record.

A I strongly support the 209,700 acre Conservationist's Wilderness Alternative including 128,600 acres in the Missouri Breaks, 52,100 acres in the Charles M. Russell) Musselshell Complex, and also the BLM-recommended Terry Badlands Wilderness.

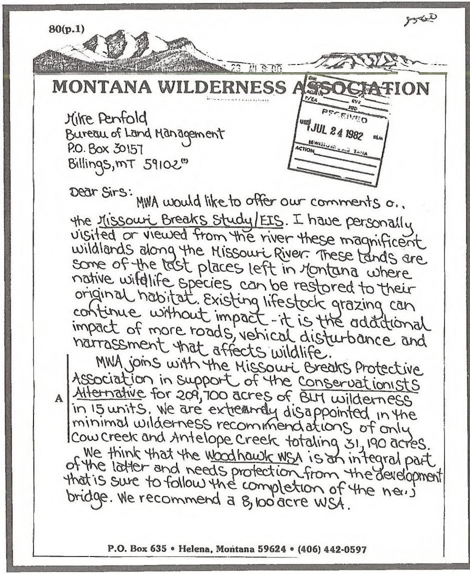
The Woodhawk area, because of its good access and location adjacent to other prime wildlands, especially deserves wilderness recommendation.

B Land exchanges between the BLM and state and private inholders should be pursued in order to consolidate wilderness lands. I also urge the BLM to protect the wilderness qualities of the Wilderness Study Areas until Congress makes the final decision on the designation of the areas.

With so much of the Missouri River and surrounding lands developed, why not preserve this remaining prairie wilderness and its abundant wildlife? When Lewis and Clark crossed the Montana plains, they touched upon civilization not at all. Our historical heritage would be ill-served if the day comes when one can travel across the Montana plains without touching upon wilderness at all.

Once again, I urge you to consider the Conservationist's Wilderness Alternative.

Sincerely,
Rosemary Rowe



80(p.1)

MONTANA WILDERNESS ASSOCIATION

RECEIVED
JUL 24 1982
BLM
LEWISTOWN, MONTANA
ACTION

Mike Penfold
Bureau of Land Management
P.O. Box 30157
Billings, MT 59102

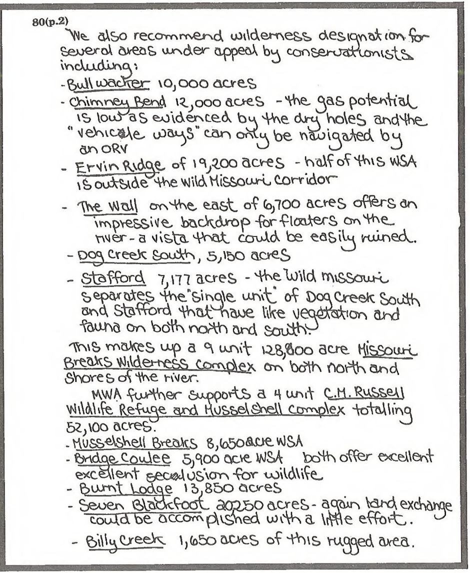
Dear Sirs:

MWA would like to offer our comments on the Missouri Breaks Study/EIS. I have personally visited or viewed from the river these magnificent wildlands along the Missouri River. These lands are some of the last places left in Montana where native wildlife species can be restored to their original habitat. Existing lifestock grazing can continue without impact - it is the additional impact of more roads, vehical disturbance and harrassment that affects wildlife.

A MWA joins with the Missouri Breaks Protective Association in support of the Conservationists Alternative for 209,700 acres of BLM wilderness in 15 units. We are extreamly disappointed in the minimal wilderness recommendations of only Cow Creek and Antelope Creek totaling 31,190 acres.

We think that the Woodhawk WSA is an integral part of the latter and needs protection from the development that is sure to follow the completion of the new bridge. We recommend a 8,100 acre WSA.

P.O. Box 635 • Helena, Montana 59624 • (406) 442-0597



80(p.2)

We also recommend wilderness designation for several areas under appeal by conservationists including:

- Bull wacker 10,000 acres
- Chimney Bend 12,000 acres - the gas potential is low as evidenced by the dry holes and the "vehicle ways" can only be navigated by an ORV
- Ervin Ridge of 19,200 acres - half of this WSA is outside the Wild Missouri Corridor
- The Wall on the east of 6,700 acres offers an impressive backdrop for floaters on the river - a vista that could be easily ruined.
- Dog Creek South, 5,150 acres
- Stafford 7,177 acres - the Wild missouri separates the "single unit" of Dog Creek South and Stafford that have like vegetation and fauna on both north and south.

This makes up a 9 unit 128,800 acre Missouri Breaks Wilderness complex on both north and shores of the river.

MWA further supports a 4 unit C.M. Russell Wildlife Refuge and Musselshell complex totalling 52,100 acres.

- Musselshell Breaks 8,650 acre WSA
- Bridge Coulee 5,900 acre WSA both offer excellent excellent secelusion for wildlife
- Burnt Lodge 13,850 acres
- Seven Blackfoot 20,250 acres - again land exchange could be accomplished with a little effort.
- Billy Creek 1,650 acres of this rugged area.

80 (p. 3)

MWA supports the BLM partial wilderness Alternative 2 (Segments A + B) for a 29,020 Terry Badlands Wilderness. This area of typical eastern Montana badlands contains a rare limber pine stand of trees. It possesses excellent wilderness qualities.

MWA believes that now is the time to protect this excellent wilderness resource from unwise development. There are few places left in eastern Montana where the land is unmarked by man's "civilizing." Because of this, native wildlife and native plant species are fast disappearing. We owe future generations an opportunity to glimpse into a small part of our heritage - the way the wild Missouri looked to Lewis and Clark in the early 1800's. A bit of a touchstone for modern civilization. We urge your consideration.

Sincerely,

Joan W. Montagne, President

(written at Judith Landing waiting for our ride!)

81(p.1)

MONTANA WOOL GROWERS ASSOCIATION

President / John P. [illegible], Jr., Bozeman
Vice President / Don McK[illegible], Great Falls
Secretary-Treasurer / Robert N. G[illegible]bert, Helena

RECEIVED
JUL 24 1982
LEWISTOWN, MONTANA
ACTION

Mr. Mike Penfold
State Director
Bureau of Land Management
Box 30157
Billings, Montana 59107

July 21,1982

RE: Blacktail Wilderness Area-Missouri Breaks Wilderness

Dear Mike:

The Montana Wool Growers Association has had discussions about Wilderness areas since such were talked about as a concept for land management. Despite assurances of grazing rights, our membership is not sold on the single use concept of Wilderness and that is to lock it up. It is our feeling that while grazing may be permitted today, when the environmental lobby gets rid of the other users they will eliminate any grazing on these "public lands." Our association passed resolutions in support of multiple use concepts of land management for both BLM and Forest Service lands; and we passed a resolution stating no more Wilderness in Montana.

A We are thus writing to oppose Wilderness designation in the Blacktail. Mr. John Conover, a member and a sheep grazer, is opposed to the designation and rightly so as his use is not compatible in the eyes of the pristine wilderness promoter. His efforts to control predators including coyotes and bears will be hampered. A Dillon newspaper account (dated June 22,1982) gives the impression that the scare devices he uses will be allowed to continue. I doubt the Wilderness advocates are going to go for shotgun blasts every twenty or thirty minutes. Our association members have had problems in the past with "wildlife managers" within the BLM/Forest Service being opposed to any kind of predator management and the Wilderness designation just gives them more opportunity to eliminate predator control.

P.O. BOX 1693 • HELENA, MONTANA 59624 • (406) 442-1330
U.P.S. ADDRESS: 7 EDWARDS STREET

81(p.2)

Mr. Penfold
page two

A Furthur, the association opposes the Wilderness designations in the Missouri breaks area as addressed by our resolutions concerning multiple use management and no more Wilderness in Montana. A great number of neighboring sheep operations in Montana's eastern district are going to be adversely affected by the subsequent management of the proposed Wilderness designation. (Cow Creek, Burnt Lodge, Antelope Creek, Seven Blackfoot and Terry Badlands) Those areas will become breeding grounds for unchecked coyote populations plus noxious weed growth.

Our association is affiliated with the Montana Public Lands Council and we refer to the letter dated July 20,1982 to your office from Will Brooke, MPLC coordinator. We concur with his comments on the proposed Wilderness designations.

Sincerely,

Robert N. Gilbert
Secretary

cc: Mr. Dick Cosgriffe
Area Manager BLM
Box 1048
Dillon, Montana 59725

Defenders OF WILDLIFE

82(p.1)

RECEIVED
JUL 24 1982
LEWISTOWN, MONTANA

July 19, 1982

Mr. Michsel Penfold, State Director
Bureau of Land Management
Billings, MT 59107

Dear Mike,

Please consider these comments regarding the Missouri Breaks wilderness suitability study, and the Bureau of Land Management's preliminary wilderness recommendations.

I'm sure you understand as well as anyone that the wilderness review process for the Missouri Breaks area has been marked by controversy and sharp polarization of viewpoints. The anti-wilderness forces in central Montana have consistently contended that no areas exist in the Missouri Breaks area that are suitable for wilderness.

Perhaps conservationists committed a basic tactical error by being too willing to compromise over what lands were truly suitable. After all, when this process was kicked off in 1979, we were talking about nearly 900,000 roadless acres in central and eastern Montana that could have been studied. We felt your original proposal to study about 500,000 of those areas was a reasonable middle ground; your decision to cut the study acreage to less than 200,000 acres certainly took us by surprise.

It seemed to conservationists that the Bureau's approach must have been to take only the most eminently qualified areas to study for their wilderness suitability. Therefore, we felt some confidence that the actual wilderness recommendations would be a large percentage of the areas studied. But obviously that's not the case; from our original 900,000 roadless acres, we're now down to less than 80,000 acres, and somehow I feel like we'd be foolish not to expect more cuts in the final recommendation.

If it sounds as if I've lost confidence in the process, it's because I have. As you know, I've personally visited or flown over nearly all of the study units; I've been in many other units that weren't studied, but certainly met the criteria. A I seriously believe the significance of some of the intrusions in the Missouri Breaks area is being greatly overstated. The BLM has chosen to view reservoir sites, old homesteads and barely discernible wheel tracks and blade cuts as major impacts that cause the land to have an unnatural appearance. The average person would hardly notice such impacts.

B In recognition that the process has faltered, Defenders of Wildlife would like to support the Conservationists Alternative for the central and eastern Montana wilderness study areas.

The first part of the recommendation would be for a 128,600 acre Missouri Breaks wilderness complex. No other BLM potential wilderness areas in Montana have the high recreational, aesthetic and ecological values that can be found in the Breaks; if there's any BLM area in the state that deserves a fair shake at wilderness, it's this area. Here are the specific units:

1244 NINETEENTH STREET, NW • WASHINGTON, DC 20036 • (202) 659-9510

82(p.2)

--The Wall. This, of course, if one of our appeal areas; we feel it clearly meets the study criteria.

--Dog Creek South. While this is a small area, it's important when considered in the context of adjacent lands with wilderness values.

--Stafford. Another small area which the Bureau dropped because of an overly strict interpretation of the Wilderness Act. It's likely the ferry will be removed.

--Ervin Ridge. We believe the wilderness values of this area supercede the oil and gas values.

--Bullwhacker. Another area which wasn't studied, even though it clearly meets the criteria.

--Cow Creek. The Bureau has recommended a 34,000 acre WSA for this area; we feel both Bull Creek and the west part of Cow Creek should be added, making a 48,000 acre area.

--Antelope Creek. While the Bureau did make a WSA recommendation for part of this area, the acreage dropped is contiguous to the Antelope Creek Wilderness proposal on the C.M. Russell National Wildlife Refuge.

--Chimney Bend. One of the most spectacular areas in the Missouri Breaks, this area was also dropped because of overly strict wilderness suitability interpretation.

--Woodhawk. This area fits in well with the Antelope Cr./Cow Cr. complex and greatly exceeds the suitability criteria.

The wilderness suitability of each of these areas deserves protection until Congress has the opportunity to assess the qualities of these lands and make a final decision. I'm confident that at some point in the future the unique values of this area will be recognized, and it should be the task of the Bureau to insure those values haven't been diminished.

Defenders of Wildlife also supports a wilderness recommendation for several areas contiguous to the Charles M. Russell National Wildlife Refuge, including Burnt Lodge, Seven Blackfoot and Billy Creek. We also believe the Musselshell Breaks and Terry Badlands merit a wilderness recommendation.

Regardless of whether these lands ever achieve a formal wilderness designation, a wilderness recommendation would underscore the fact that the primary values of these areas lie in their roadless qualities. Such recommendations will continue a valuable management trend.

Sincerely,

Hank Fischer
Hank Fischer
Montana Representative

cc: Sen. Max Baucus
Sen. John Melcher
Gov. Ted Schwinden

THE WILDERNESS SOCIETY
Northern Rockies Regional Office
107 West Lawrence, P. O. Box 1184, Helena, Montana 59601 (406)443-7350

83(p.1)

Statement on BLM Wilderness Suitability Studies
for the Missouri Breaks and Dillon Resource Area

submitted by Bill Cunningham
Regional Representative
The Wilderness Society
at the BLM public hearing in
Helena, MT
June 24, 1982

On behalf of The Wilderness Society I wish to submit our preliminary comments on the draft wilderness suitability studies for the Missouri Breaks and Dillon Resource Areas. Additional comments will be submitted before the July 26, 1982 deadline after our upcoming week-long field trip in the Missouri Breaks, scheduled June 28 - July 2, has occurred.

MISSOURI BREAKS STUDY/EIS

During the past several years I have personally visited all of the WSAs and appeal units in the Missouri Breaks in the company of BLM officials and local ranchers. I've seen, felt and experienced these wildlands from the river, by air and by foot. There is truly a great potential to protect a magnificent Missouri Breaks Cluster Wilderness from the Wall to the C M Russell National Wildlife Refuge. Further, this irreplaceable wildland resource can be protected without significant resource conflict and with no impairment of existing livestock grazing operations under the recently-adopted BLM Wilderness Management Policy.

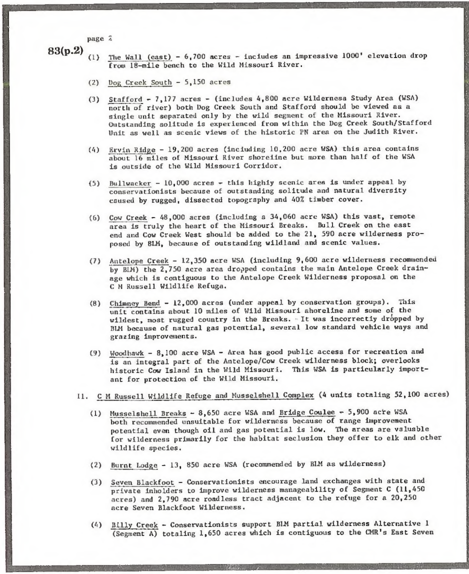
Because of my firsthand knowledge of the wilderness resource in the Missouri Breaks I am especially disappointed by the minimal wildernss recommendations of only 2 units: portions of Cow Creek and Antelope Creek totaling some 31,190 acres.

A The Wilderness Society joins with the Missouri Breaks Protective Association and other conservation organizations in strong support of the Conservationists Alternative for 209,700 acres of BLM-administered wilderness in 15 units along the Missouri Breaks C M Russell Wildlife Refuge, Musselshell River and the Terry Badlands. This sound and carefully balanced alternative represents only a fraction of the total wildland resource in the region. Wildlife will benefit immensely from the needed protection of The Wilderness Act - these areas are still among the few places left in the Northern Great Plains where native wildlife species, such as bighorn sheep and elk, can be restored to their original habitat.

A listing of the Conservationists Alternative is as follows:

I. Missouri Breaks Wilderness Complex - 128,600 acres in 9 units on both sides of the Wild Missouri.

"In wildness is the preservation of the world." - Thoreau



83(p.2)

(1) The Wall (east) - 6,700 acres - includes an impressive 1000' elevation drop from 18-mile bench to the Wild Missouri River.

(2) Dog Creek South - 5,150 acres

(3) Stafford - 7,177 acres - (includes 4,800 acre Wilderness Study Area (WSA) north of river) both Dog Creek South and Stafford should be viewed as a single unit separated only by the wild segment of the Missouri River. Outstanding solitude is experienced from within the Dog Creek South/Stafford Unit as well as scenic views of the historic PN area on the Judith River.

(4) Ervin Ridge - 19,200 acres (including 10,200 acre WSA) this area contains about 16 miles of Missouri River shoreline but more than half of the WSA is outside of the Wild Missouri Corridor.

(5) Bullwacker - 10,000 acres - this highly scenic area is under appeal by conservationists because of outstanding solitude and natural diversity caused by rugged, dissected topography and 40% timber cover.

(6) Cow Creek - 48,000 acres (including a 34,060 acre WSA) this vast, remote area is truly the heart of the Missouri Breaks. Bull Creek on the east end and Cow Creek West should be added to the 21, 590 acre wilderness proposed by BLM, because of outstanding wildland and scenic values.

(7) Antelope Creek - 12,350 acre WSA (including 9,600 acre wilderness recommended by BLM) the 2,750 acre area dropped contains the main Antelope Creek drainage which is contiguous to the Antelope Creek Wilderness proposal on the C M Russell Wildlife Refuge.

(8) Chimney Bend - 12,000 acres (under appeal by conservation groups). This unit contains about 10 miles of Wild Missouri shoreline and some of the wildest, most rugged country in the Breaks. It was incorrectly dropped by BLM because of natural gas potential, several low standard vehicle ways and grazing improvements.

(9) Woodhawk - 8,100 acre WSA - Area has good public access for recreation and is an integral part of the Antelope/Cow Creek wilderness block; overlooks historic Cow Island in the Wild Missouri. This WSA is particularly important for protection of the Wild Missouri.

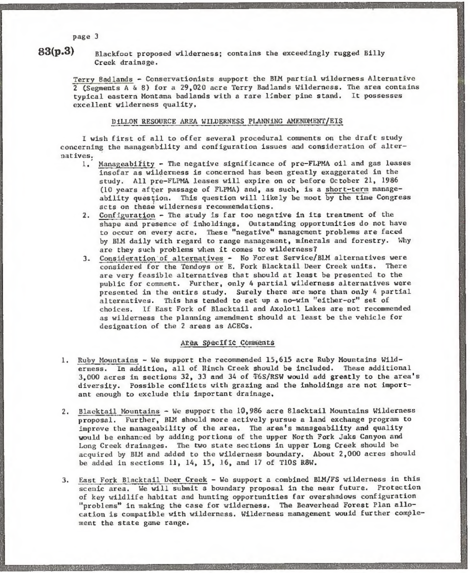
II. C M Russell Wildlife Refuge and Musselshell Complex (4 units totaling 52,100 acres)

(1) Musselshell Breaks - 8,650 acre WSA and Bridge Coulee - 5,900 acre WSA both recommended unsuitable for wilderness because of range improvement potential even though oil and gas potential is low. The areas are valuable for wilderness primarily for the habitat seclusion they offer to elk and other wildlife species.

(2) Burnt Lodge - 13, 850 acre WSA (recommended by BLM as wilderness)

(3) Seven Blackfoot - Conservationists encourage land exchanges with state and private inholders to improve wilderness manageability of Segment C (11,450 acres) and 2,790 acre roadless tract adjacent to the refuge for a 20,250 acre Seven Blackfoot Wilderness.

(4) Billy Creek - Conservationists support BLM partial wilderness Alternative 1 (Segment A) totaling 1,650 acres which is contiguous to the CMR's East Seven Blackfoot proposed wilderness; contains the exceedingly rugged Billy Creek drainage.



83(p.3)

Terry Badlands - Conservationists support the BLM partial wilderness Alternative 2 (Segments A & B) for a 29,020 acre Terry Badlands Wilderness. The area contains typical eastern Montana badlands with a rare limber pine stand. It possesses excellent wilderness quality.

DILLON RESOURCE AREA WILDERNESS PLANNING AMENDMENT/EIS

I wish first of all to offer several procedural comments on the draft study concerning the manageability and configuration issues and consideration of alternatives.

1. Manageability - The negative significance of pre-FLPMA oil and gas leases insofar as wilderness is concerned has been greatly exaggerated in the study. All pre-FLPMA leases will expire on or before October 21, 1986 (10 years after passage of FLPMA) and, as such, is a short-term manageability question. This question will likely be moot by the time Congress acts on these wilderness recommendations.
2. Configuration - The study is far too negative in its treatment of the shape and presence of inholdings. Outstanding opportunities do not have to occur on every acre. These "negative" management problems are faced by BLM daily with regard to range management, minerals and forestry. Why are they such problems when it comes to wilderness?
3. Consideration of alternatives - No Forest Service/BLM alternatives were considered for the Tendoys or E. Fork Blacktail Deer Creek units. There are very feasible alternatives that should at least be presented to the public for comment. Further, only 4 partial wilderness alternatives were presented in the entire study. Surely there are more than only 4 partial alternatives. This has tended to set up a no-win "either-or" set of choices. If East Fork of Blacktail and Axolotl Lakes are not recommended as wilderness the planning amendment should at least be the vehicle for designation of the 2 areas as ACECs.

Area Specific Comments

1. Ruby Mountains - We support the recommended 15,615 acre Ruby Mountains Wilderness. In addition, all of Hinch Creek should be included. These additional 3,000 acres in sections 32, 33 and 34 of T6S/R5W would add greatly to the area's diversity. Possible conflicts with grazing and the inholdings are not important enough to exclude this important drainage.

2. Blacktail Mountains - We support the 10,986 acre Blacktail Mountains Wilderness proposal. Further, BLM should more actively pursue a land exchange program to improve the manageability of the area. The area's manageability and quality would be enhanced by adding portions of the upper North Fork Jake Canyon and Long Creek drainages. The two state sections in upper Long Creek should be acquired by BLM and added to the wilderness boundary. About 2,000 acres should be added in sections 11, 14, 15, 16, and 17 of T10S R8W.

3. East Fork Blacktail Deer Creek - We support a combined BLM/FS wilderness in this scenic area. We will submit a boundary proposal in the near future. Protection of key wildlife habitat and hunting opportunities far overshadows configuration "problems" in making the case for wilderness. The Beaverhead Forest Plan allocation is compatible with wilderness. Wilderness management would further complement the state game range.

83(p.4)

4. Farlin Creek - This 610 acre addition to the E. Pioneers Wilderness proposal is most appropriate.

5. Tendoys - The 15,509 acre Hidden Pasture WSA and the 9,650 acre Bell/Limekiln Canyon WSA should both be recommended as suitable for wilderness. This suitability is augmented by the contiguous undeveloped national forest land in the Tendoys.

This concludes our preliminary comments. We thank you for the opportunity to present this statement and we ask that it be included in the official hearing record.

Lester Jens, Chairman • Robert Rath • Alvin Stickel • Robert Reukauf • Joe Roos

RUTH V. ROOS, Secretary-Treasurer

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PRAIRIE COUNTY Co-operative State Grazing District

TERRY, MONTANA 59349

ROUTING	INITIAL	DATE IN	DATE OUT
1 SD			
2 ASD			
EEO			
R/W			
SP ASST			
PT UNION			
PA			
3 RES	Cry	Original	
OPR			
ADM			
ACTION			
FILING	8500		

July [illegible]5, 1982

Mr. Mike Penfold
Montana State Director
Bureau of Land Management
P.O. Box 30157
Billings, Montana 59701

Dear Mr. Penfold;

Although we have expressed our views on the proposed Terry Badlands Wilderness Area during the entire process, the following is our written comments for the public record:

Basically, we are not against "Wilderness" persay, we only wish the designation would apply only to those lands of which are truly wilderness in the Terry Badlands, i.e. the 6 sections of which are truly rough and inaccessible in Verlin Hines allotment. To prohibit multiple use of the large amount of public land as the existing "Wilderness Study Area" is now, will benefit only a few and adversely affect many.

The subject 6 sections are not included within Mr. Hines's class I grazing priveleges, are without any improvements and accessible only by foot or horseback. The remaining lands identified in the existing Wilderness Area are included within class I grazing priveleges, have existing range improvments (which require maintenance and are relatively accessible via vehicle).

In summary it would not be in the general public's interest or within B.L.M.'s multiple use policy to designate the Terry Badland Wilderness area as now proposed.

Yours truly,

Lester Jens

Lester Jens, Chairman
Prairie County Coop. State
Grazing District.

ORIGINAL

BEFORE THE

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

In the Matter of:)
)
PUBLIC HEARING FOR THE)
MISSOURI BREAKS DRAFT)
WILDERNESS SUITABILITY)
STUDY/ENVIRONMENTAL IMPACT)
STATEMENT.)

TRANSCRIPT OF

PROCEEDINGS

Wednesday, June 16, 1982
7:15 p.m.
VFW Hall
Jordon, Montana

APPEARANCES:

DAN STARK, Hearing Officer

CARY PAVEK

G. L. BUCK DAMONE

PROCEEDINGS

MR. STARK: I think it's now time to start our hearing. We delayed the hearing for fifteen minutes to give other people a chance to arrive.

My name is Dan Stark. This is a public hearing for the Missouri River Breaks Draft Wilderness Suitability Study Environmental Impact Statement.

The Bureau of Land Management recently completed a Draft Suitability Study EIS for twelve wilderness study areas in the Lewistown and Miles City Districts. The twelve wilderness study areas include a total of 170,200 acres of public lands. The draft document was mailed to all known interested parties on May 10, 1982.

The preferred alternatives recommend wilderness designation for Burnt Lodge, 13,850 acres, portions of Cow Creek, 21,590 acres and Antelope Creek, 9,600 acres in the Lewistown District and portions of Seven Blackfoot, 5,710 acres and Terry Badlands, 29,020 acres in the Miles City District. There is a total of 79,770 acres within the five areas.

The preferred alternatives propose no wilderness for the Dog Creek South, 5,150 acres; Stafford, 4,800 acres; Ervin Ridge, 10,200 acres; Woodhawk, 8,100 acres; portions of Cow Creek, 12,460 acres; and Antelope Creek, 2,750 acres in the Lewistown District and Musselshell Breaks, 8,650 acres; Bridge

Coulee, 5,900 acres; Billy Creek, 3,450 acres; portions of Seven Blackfoot, 14,540 acres; and Terry Badlands, 14,430 acres in the Miles City District.

The no-wilderness alternative was recommended for a total of 90,430 acres.

This hearing is being held by the Bureau of Land Management in compliance with Section 3(d)(1)(B) of the Wilderness Act of September 3, 1964, for the purpose of accepting testimony from anyone who could be affected by the recommendations.

I am Dan Stark, and I am on the state director's staff of the Bureau of Land Management in Billings. I will be conducting the hearing. A court reporter is here to record the proceedings. Testimony will be accepted relevant to the recommendations set forth in the suitability study EIS previously identified. Testimony relating to other issues will not be considered. To ensure that everyone has an opportunity to have his testimony heard, I ask that, as nearly as possible, your remarks be limited to the recommendations and environmental consequences identified in the draft document. I would like to remind you at this time, if you have not already done so, to please register at the door and indicate if you wish to make an oral or written statement.

The statements received will be analyzed by the Lewistown District Office. The written record of that analysis

as well as transcripts of the hearing will be prepared and made available for inspection in the Lewistown and Miles City District Offices. If you wish to purchase copies of the transcript of this hearing, please leave your name and address with the court reporter. A copy of the hearing record and analysis will be made available to each county involved in the study areas upon request by those county commissioners.

The analysis of the testimony received will be used to determine what changes, if any, will be required in the recommendations set forth in the document. The analysis of the testimony and a copy of the transcript will be incorporated in the Final Environmental Impact Statement and Wilderness Study Report which will be transmitted to the Secretary of the Interior, the President and Congress. Copies of the final documents will also be provided to all known interested parties following concurrence and signature by the Secretary of the Interior.

I would like to call upon Vernon A. Coulter to present his statement, and you can use--Mr. Coulter, you can use the podium here or sit and--Kenneth. I am sorry.

VOICE: You read that wrong.

MR. STARK: Kenneth? It's Kenneth. I blew that one. I am sorry. Is Kenneth here?

MR. COULTER: I just have a short statement to make. I think everybody can hear me from here. I guess it's not too

important whether they do or not, but I would like to state
that local concerns of many ranchers are pretty well documented
101 as I read this on Page 77. Many of these are quite real and
practical management concerns for adjacent landowners.

For instance, will local landowners be permitted to
immediately enter and control fires which threaten their
private property? Will chemical control of noxious weeds con-
A tinue to be permitted in future years which may threaten
private property? If farm land produces dust blowing across
designated wilderness will this be in violation of air quality
standards?

I would like to call your attention to a sentence on
Page 99 following the heading of "Naturalness," quote. This
has to do with the fences and vehicle ways inside the wilder-
ness study areas. The quote is "They would not be rehabili-
B tated if the wilderness study area were designated wilderness
unless they proved unnecessary to grazing management." I
suspect there must be a misprint there. Otherwise it appears
to me that they would be rehabilitated if they proved
unnecessary. Would this please be explained.

In my opinion, this area has been improved for game animals, birds and other wildlife by the same developments which have benefited people and livestock such as water, fences, rotation of grazing, roads for access. This has allowed people to use the area. It has also benefited the area

for use of wildlife, and I see no improvement by designating
it wilderness for any particular species of animal on earth,
102 including man.

Thank you.

VOICE: Excuse me, Ken. Were you talking about a specific area or all in one?

MR. COULTER: In Garfield County.

VOICE: All of them?

MR. COULTER: All of them, yes.

MR. STARK: The next person is Dave Huston; is that correct?

VOICE: What did you say?

MR. STARK: Dave Huston. Did you have a statement, please?

MR. HUSTON: Yes.

MR. STARK: Would you please stand up here so the court reporter can get it all.

MR. HUSTON: When I read this book over I would
like to know--it states in there that the feelings are mixed
A in Garfield County on this wilderness. It said that one
person, one rancher, said they wouldn't mind a wilderness being
there. Why didn't the thing state that about everybody else in
the county was against it? They never mentioned that at all.

This is really not--not a wilderness country, and
B something that they never seem to put in this, this material on

these, and they have been told time after time at these hearings and in written statements that if it's left the way it is those ranchers that surround the thing never stop anybody from going in, doing anything they want to in there, walking or hunting, whatever they want to do, but if it is made a wilderness that they will not let them in there. This has got to be the deciding factor when the smoke all clears away. If you can't get them donkies in there there is no need of fouling it up for everybody else by designating it a wilderness.

B Nobody is against them using it. Like Kenneth Coulter said, it's used for game and livestock, everything. Everything's there as it is, and the people can go in and use it, but if they can't go in and use it when you designate it as a wilderness you had better throw this wilderness stuff out the window.

That never seems to be mentioned that they are not going to let these people in. What are they going to do? Drop them in out of the sky? You can't get them in no other way. Them people ain't going to let them; when it is the way it is now they let anybody in there, but that never seems to appear in any of these books and material at all, and they have been told by every public hearing by those guys that surround that that it's going to be that way, and it's been in written statements, too.

That's all I have got to say. Just leave it alone just like it is so everybody can use it.

103 MR. STARK: Thank you, Mr. Huston.
Mr. George Wilson.

VOICE: Who?

MR. STARK: Wilson.

MR. WILSON: Well, I just got here.

MR. STARK: You can use the podium if you wish, stand up or sit down, however you want to do it.

MR. WILSON: Well, Dave summed it up. I didn't know what he was going to say, but he took the words right out of my mouth.

VOICE: We have never seen you behind a podium. You get behind there.

A MR. WILSON: Dave summed it up just the way I have figured, too, that the way it is now everybody can use this land out there, whether they are old, retired people that have worked all their lives and paid taxes. They can drive out on one of them points and enjoy it, and the wilderness there are just a very few that can get any enjoyment out of it, a few backpackers, and there is nothing stopping them the way it is now. They can backpack off in that rough country and nobody cares about it.

There have been a few of them out there, and there has been nobody stopped them, but if it's wilderness we just feel that it's just set aside for a chosen few, and those people can't enjoy that. They might want to go out on one of those points. Some of those are more scenic than where they are planning on wilderness and anywhere else to have a picnic on. Those people that's worked all their lives and paid taxes ought to have the privilege of doing that where just a few backpackers or some college kids that's able to do it can go in there, and that's the reason us ranchers feel that we are not going to--we are just not going to give them access, because as long as it's going to be for a chosen few like that, why, there is no need of letting them go in there.

That's about all I have got to say about it. It's the way it is. Anybody can go in there and nobody is denying them from it. I have had backpackers out there. I had some there this year and some last year. They stopped and asked if they could go, and I said, "Sure, but just keep--pick up your litter. That's all I ask of you. And leave things the way they are." They went in there and enjoyed it, I guess. Anyway, they came back out alive, but I also like to see these older people that's crippled or--go in there, retired, that paid taxes all their life. They ought to be just as well privileged to go in there as anybody else.

That's all I have got to say.

MR. STARK: Thank you, Mr. Wilson.

I would like to wait a little bit longer just in case some other people get in here, because the weather has

104

not been real neat off the roads. We will give about a five-minute recess and reconvene and if there are no more testimonies at that time then we will close out.

(A recess was then taken.)

It's now 7:35. I would like to reconvene the hearing and would Jerry Caldwell come forth and--

MR. CALDWELL: My name is Jerry Caldwell. I am a local rancher. We realize that the BLM is mandated by Congress and the Wilderness Bill to go through and inventory these lands, but what we don't understand is how come that they try and put them together in the small pieces that they are in Garfield County.

Of course, they tell me you are doing that all over in this cherry-stemming I guess they call it, put little pieces here and there, roads here and there, fences. Those fences and those roads and those reservoirs were put in there for a purpose. That was to improve the land, whether it be for livestock, wildlife or whatever, and, as Dave and Ken mentioned, people can get in there and use them the way they are. They do use them, and we can't see where the wilderness designation will help in any way for these lands. They have been that way ever since anybody, the oldest people in the county, have been around. They haven't been nothing but improved and made better in forage and in use, so we don't feel that they--it would help one bit to put them into wilderness, and it brings it down to

B the point that you cannot be used by the general public.

Thank you.

MR. STARK: Thank you, Mr. Caldwell.

In closing the record, I would like to remind you that the testimony received at this hearing will be available in the form of a transcript and if you wish to receive copies of this transcript please leave your name and address with the court reporter.

You are also reminded that all testimony will be analyzed by the Lewistown District manager and a written record of that analysis will be prepared and will be available for inspection at the Lewistown and Miles City District offices. The analysis of this testimony will be used to determine what changes, if any, are required in the wilderness suitability recommendations.

The final recommendations will be forwarded to the President following concurrence and signature by the Secretary of the Interior.

The hearing is closed; however, the record shall remain open until July 26, 1982. We urge you to contact those who could not make it to this hearing, and I assume there are some who are kind of stranded because of the weather, to submit their written comment. I appreciate all of you coming and providing us with your testimony.

The hearing is closed at--well, I will round it out.

and say twenty to eight.

(The hearing was then concluded at the hour of 7:40 p.m., this 16th day of June, 1982.)

This is to certify that the attached proceedings before the United States Department of the Interior, Bureau of Land Management, in the matter of a public hearing for the Missouri Breaks Draft Wilderness Suitability Study/Environmental Impact Statement, in the VFW Hall, Jordon, Montana, on Wednesday, June 16, 1982, were held as herein appears and that this is the original transcript thereof for the file of the Department or Commission.

Certified Shorthand Reporter
and
Registered Professional Reporter

ORIGINAL

BEFORE THE

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

In the Matter of:

PUBLIC HEARING FOR THE MISSOURI BREAKS DRAFT WILDERNESS SUITABILITY STUDY/ENVIRONMENTAL IMPACT STATEMENT.

TRANSCRIPT OF

PROCEEDINGS

Thursday, June 17, 1982
7 p.m.
Prairie County State Grazing
District Office
612 Laundre
Terry, Montana

APPEARANCES:

DAN STARK, Hearing Officer

GARY PAVEK

G. L. BUCK DAMONE

PROCEEDINGS

MR. STARK: This is a public hearing for the Missouri River Breaks Draft Wilderness Suitability Study Environmental Impact Statement.

The Bureau of Land Management recently completed a Draft Suitability Study EIS for twelve wilderness study areas in the Lewistown and Miles City Districts. The twelve wilderness study areas include a total of 170,200 acres of public lands. The draft document was mailed to all known interested parties on May 10, 1982.

The preferred alternatives recommend wilderness designation for Burnt Lodge, 13,850 acres, portions of Cow Creek, 21,590 acres and Antelope Creek, 9,600 acres in the Lewistown District and portions of Seven Blackfoot, 5,710 acres and Terry Badlands, 29,020 acres in the Miles City District. There is a total of 79,770 acres within the five areas.

The preferred alternatives propose no wilderness for the Dog Creek South, 5,150 acres; Stafford, 4,800 acres; Ervin Ridge, 10,200 acres; Woodhawk, 8,100 acres; portions of Cow Creek, 12,460 acres; and Antelope Creek, 2,750 acres in the Lewistown District and Musselshell Breaks, 8,650 acres; Bridge Coulee, 5,900 acres; Billy Creek, 3,450 acres; portions of Seven Blackfoot, 14,540 acres; and Terry Badlands, 14,430 acres in the Miles City District.

The no-wilderness alternative was recommended for a total of 90,430 acres.

This hearing is being held by the Bureau of Land Management in compliance with Section 3(d)(1)(B) of the Wilderness Act of September 3, 1964, for the purpose of accepting testimony from anyone who could be affected by the recommendation.

I am Dan Stark, and I am on the state director's staff of the Bureau of Land Management in Billings. I will be conducting the hearing. A court reporter is here to record the proceedings. Testimony will be accepted relevant to the recommendations set forth in the suitability study EIS previously identified. Testimony relating to other issues will not be considered. To ensure that everyone has an opportunity to have his testimony heard, I ask that, as nearly as possible, your remarks be limited to the recommendations and environmental consequences identified in the draft document. I would like to remind you at this time, if you have not already done so, to please register at the door and indicate if you wish to make an oral or written statement.

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I would like now to call upon I think it's Mr. John Pfaff--

MR. PFAFF: Yes.

MR. STARK: --to present your statement.

MR. PFAFF: This is a copy of a letter I sent to Mr. Freeman in Lewistown.

VOICE: Can you speak a little louder?

MR. PFAFF: With the exceptions of Sections 1, 2, 3, 10, 11, 12 and North Half of Section 14, Township 12 North, Range 50 East, I am opposed to adding any more lands to the National Wilderness Preservation System. The above-mentioned lands meet all wilderness characteristics and values and should be managed as such.

106 All other lands in the Terry Badlands study group are best managed under the multiple-use concept with proper attention given to their contribution to America's food, fiber and recreational energy needs.

Thank you.

MR. STARK: The next person we have to give a statement is Mr. James Phelps.

MR. PHELPS: Here is a copy of the statement.

My name is James Phelps. I am the current state president of Montana Audubon Council. The council is composed of the eight audubon chapters in Montana. We have more than 2400 members in the state.

My comment is upon the draft Bureau of Land Management study which after becoming final will recommend to Congress the wilderness study areas that should become a part of the National Wilderness Preservation System. Congress has to take the final action. What we have here are BLM recommendations.

The BLM draft study recommends that Congress designate 79,770 acres in five areas as wilderness and drops as non-wilderness something more than 90,000. Twelve areas were studied. The twelve in turn were winnowed down from the many originally proposed. Conservation people are disappointed

in the BLM final recommendations.

We support a conservationist's alternative. For convenience these may be summarized in three groups. One, the Missouri Breaks Wilderness Complex, amounts to 128,600 acres in nine units on both sides of the Wild Missouri. The BLM Draft Wilderness Study Policy states that each WSA must be considered on its own merits alone and gave this as one of the reasons for dropping grouping of certain WSA's. That's the abbreviation for wilderness study areas.

Dog Creek South and the Stafford WSA's are separated by the Missouri River. The riverbed is considered as state land. This was given as one reason for dropping these two units. We believe this is an unduly restrictive interpretation of the 1964 Wilderness Act.

Second, Burnt Lodge, Seven Blackfoot, Billy Creek and Musselshell Breaks with Bridge Coulee, which can be termed the Charles M. Russell National Wildlife Refuge, and Musselshell Complex. Conservationists recommend the Musselshell Breaks with Bridge Coulee because of elk and wildlife. We agree with the BLM Burnt Lodge recommendation of 13,850 acres adjacent to the CMR on the south. We support BLM Alternative 1, with regard to Billy Creek WSA, adjacent to the CMR. We support the long-range idea with the Seven Blackfoot WSA to encourage land exchanges. There is a state section in there.

Third, the Terry Badlands. Conservationists support the BLM partial wilderness Alternative 2, Segments A and B, for a total of 29,020 acres. The WSA contains typical eastern Montana badlands with a rare stand of limber pine.

That's the end of my prepared statement.

I don't know how the exceptions that you talk about, John, fit in, with what exceptions they fit, but I think that--that we both have real good reasons for saying what they are, and I respect your opinion.

MR. PFAFF: If you are familiar with this area, the scenic view up here, that's the land from there down to the river.

MR. PHELPS: Okay. I couldn't locate it on a map in a hurry. Thank you.

MR. STARK: Thank you for your statement.

Do you think there will be any more coming in? Would a recess be worth having?

MS. ROOS: Your guess is as good as mine. I don't know.

MR. STARK: Let's take a five-minute recess and we will reconvene this at 7:30.

(A recess was then taken.)

MR. STARK: Okay. Being 7:30, we will reconvene this hearing and Mr. Phelps would like to make an additional statement.

MR. PHELPS: I noticed in the Draft EIS the restrictions on use of vehicles for ranchers to maintain fences or to check livestock and things like that, and there are two sides to that coin. It may look a little unduly restrictive and just because I am in favor of the wilderness proposals doesn't mean I am against using vehicles by ranchers, but, like I said, it's two-edged coin. This badlands country is a very fragile country. It erodes pretty easy. All of us have seen some four-wheel start a track and it becomes a gully, so I really don't know what the answer is, but I would like the BLM to not be arbitrary on the use of vehicles. I think they should favor the rancher if at all possible. That becomes another problem. If a hunter sees a rancher in there and doesn't know he is a rancher there might be a dispute. It's not an easy question. I don't envy the resource people.

MR. STARK: Thank you.

There being no further testimony, closing the record, I would like to remind you that the testimony received at this hearing will be available in the form of a transcript, and if you wish to receive copies of this transcript please leave your name and address with the court reporter.

You are also reminded that all testimony will be analyzed by the Lewistown District manager and a written record of that analysis will be prepared and will be available for inspection at the Lewistown and Miles City District offices. The analysis of this testimony will be used to determine what changes, if any, are required in the wilderness suitability recommendations.

The final recommendations will be forwarded to the President following concurrence and signature by the Secretary of the Interior.

The hearing is closed. However, the record shall remain open until July 26, 1982. We urge you to contact those who could not make it to this hearing to submit their written comment. I appreciate all of you coming and providing us with your testimony, and BLM people that are here will stay a while to answer any particular questions that you may have on the documents.

Thank you.

(The hearing was then concluded at the hour of 7:35 p.m., this 17th day of June, 1982.)

This is to certify that the attached proceedings before the United States Department of the Interior, Bureau of Land Management, in the matter of a public hearing for the Missouri Breaks Draft Wilderness Suitability Study/Environmental Impact Statement, in the Prairie County State Grazing District Office, 612 Laundre, Terry Montana, on Thursday, June 17, 1982, were held as herein appears and that this is the original transcript thereof for the file of the Department or Commission.

Certified Shorthand Reporter
and
Registered Professional Reporter

ORIGINAL

BEFORE THE

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

In the Matter of:)
PUBLIC HEARING FOR THE)
MISSOURI BREAKS DRAFT)
WILDERNESS SUITABILITY)
STUDY/ENVIRONMENTAL IMPACT)
STATEMENT.)

TRANSCRIPT OF

PROCEEDINGS

Tuesday, June 22, 1982
7:30 p.m.
G-N Motor Hotel
Malta, Montana

APPEARANCES:

DON STARK, Hearing Officer

GARY PAVEK

G. L. BUCK DAMONE

PROCEEDINGS

MR. STARK: This is a public hearing for the Missouri River Breaks Draft Wilderness Suitability Study Environmental Impact Statement.

The Bureau of Land Management recently completed a Draft Suitability Study Environmental Impact Statement for twelve wilderness study areas in the Lewistown and Miles City Districts. The twelve wilderness study areas include a total of 170,200 acres of public lands. The draft document was mailed to all known interested parties on May 10, 1982.

The preferred alternatives recommend wilderness designation for Burnt Lodge, 13,850 acres; portions of Cow Creek, 21,590 acres; and Antelope Creek, 9,600 acres in the Lewistown District and portions of Seven Blackfoot, 5,710 acres; and Terry Badlands, 29,020 acres in the Miles City District. There is a total of 79,770 acres within the five areas.

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The no-wilderness alternative was recommended for a total of 90,430 acres.

This hearing is being held by the Bureau of Land Management in compliance with Section 3(d)(1)(B) of the Wilderness Act of September 3, 1964, for the purpose of accepting testimony from anyone who could be affected by the recommendations.

I am Dan Stark, and I am on the state director's staff of the Bureau of Land Management in Billings. I will be conducting the hearing. A court reporter is here to record the proceedings. Testimony will be accepted relevant to the recommendations set forth in the suitability study EIS previously identified. Testimony relating to other issues will not be considered. To ensure that everyone has an opportunity to have his testimony heard, I ask that, as nearly as possible, your remarks be limited to the recommendations and environmental consequences identified in the draft document. I would like to remind you at this time, if you have not already done so, to please register at the door and indicate if you wish to make an oral or written statement.

The statements received will be analyzed by the Lewistown District Office. The written record of that analysis, as well as transcripts of the hearing, will be prepared and made available for inspection in the Lewistown and Miles City District Offices. If you wish to purchase copies of the transcript of this hearing, please leave your name and address
107 with the court reporter. A copy of the hearing record and analysis will be made available to each county involved in the study areas upon request by those county commissioners.

The analysis of the testimony received will be used to determine what changes, if any, will be required in the recommendations set forth in the document. The analysis of the testimony and a copy of the transcript will be incorporated in the Final Environmental Impact Statement and Wilderness Study Report which will be transmitted to the Secretary of the Interior, the President and Congress. Copies of the final documents will also be provided to all known interested parties following concurrence and signature by the Secretary of the Interior.

I would now like to call upon I think it's Mr. is it Ray Shores?

MR. SHORES: I just have a couple points that I would like to bring up here. I am a landowner adjoining the Burnt Lodge wilderness study area, and I protest the closing of
A the road down the top of Blue Ridge, Township 23 North, Range 33 East, Section 28. I own another parcel of land further down the ridge and I don't want to have it isolated by this closure, and there is another point I would like to bring up, and I fully disagree with allowing fires to burn under supervision in
B this area. They might do it in the mountains where we have

lots of timber and stuff, but what percentage of Phillips
County has conifer timber on it? It's very limited in this
B country, and it takes thirty to forty years to grow it back,
and the watershed erodes during this time, and I would like to
see fire control in the area.

I personally am for non-wilderness concept. I don't think we need it. The area is rugged, primitive, and it's been this way for years, and I see more people coming into the area if it's made into wilderness, and I think we ought to leave it the way it is.

MR. STARK: The next person who would like to make a statement is Charles G. Barnard.

108 MR. BARNARD: Well, I have lived in this area all my
life and I have observed the game as it's multiplied since the
Thirties. When I first was down in that country, if you were
in there all day you would see one or two tracks of deer. I
have seen it from that to plentiful supply of deer. I have
A seen the elk being introduced, and I haven't seen the land
marred too much, so I--I really feel that it isn't necessary,
as remote as it is, I don't feel it's necessary that it is a
wilderness area.

MR. STARK: Thank you.

Mr. Buddy Lundstrom.

109 MR. LUNDSTROM: I am here representing the Malta Bow Hunters Club, and we are against any wilderness in that

area. Some of the reasons are it limits your access to downed game, and we are down there hunting. The heat plays a big part in it, and it's real important for us to keep good landowner-hunter relationship, and we know that all the landowners in that area are against it, and we would like to back them all we can to help them out. We don't have any use for wilderness. That's all I have to say.

MR. STARK: Thank you.

It's now about 7:50. I have no other people wishing to make a statement. I would like to have a short recess for about five minutes in case some others come in wishing to make a statement since we are here tonight. Would you like to make a statement?

MR. SKINNER: Yes.

MR. STARK: When you get up here could you give us your name and where you are from.

110 MR. SKINNER: I am Randy Skinner from Malta, Montana. I am an avid hunter, and I do like to backpack, and this area is really remote, and I don't feel it needs to be into wilderness. As far as backpackers or hikers are concerned, it's no place for a backpacker or a sightseer. There is no water to speak of, and I am sure that the reservoirs that are there--it's not drinkable water. It's just a remote area and I think it should be left the way it is.

MR. STARK: Thank you.

There being no other people right now we will have that five-minute recess and see if more will come in.

(A recess was then taken.)

MR. STARK: Our five-minute recess is up. Is there any person present that would wish to make a statement? Okay.

Closing the record, I would like to remind you that the testimony received at this hearing will be available in the form of a transcript and if you wish to receive copies of this transcript please leave your name and address with the court reporter.

You are also reminded that all testimony will be analyzed by the Lewistown District manager and a written record of that analysis will be prepared and will be available for inspection at the Lewistown and Miles City District Offices. The analysis of this testimony will be used to determine what changes, if any, are required in the wilderness suitability recommendations.

The final recommendations will be forwarded to the President following concurrence and signature by the Secretary of the Interior.

The hearing is closed. However, the record shall remain open until July 26, 1982. We urge you to contact those who could not make it to this hearing and have them submit their written comment. BLM people will stay a while to answer any questions you may have concerning the document itself and

for clarification. I appreciate all of you coming and providing us with your testimony.

(The hearing was then concluded at the hour of 7:55 p.m., this 22nd day of June, 1982.)

This is to certify that the attached proceedings before the United States Department of the Interior, Bureau of Land Management, in the matter of a public hearing for the Missouri Breaks Draft Wilderness Suitability Study Environmental Impact Statement, at the G-N Motor Hotel, Malta, Montana, on Tuesday, June 22, 1982, were held as herein appears and that this is the original transcript thereof for the file of the Department or Commission.

Certified Shorthand Reporter
and
Registered Professional Reporter

BEFORE THE

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

In the Matter of: PUBLIC HEARING FOR THE MISSOURI BREAKS DRAFT WILDERNESS SUITABILITY STUDY/ENVIRONMENTAL IMPACT STATEMENT.	TRANSCRIPT OF PROCEEDINGS

Wednesday, June 23, 1982
7:50 p.m.
Winifred High School
Winifred, Montana

APPEARANCES:

DON STARK, Hearing Officer

GARY PAVEK

G. L. BUCK DAMONE

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I would like to now call Mr. Ward Burleigh to make his statement and please use the podium right here.

111 MR. BURLEIGH: Thank you, Mr. Stark.

I am Ward Burleigh and I operate a ranch just south of Lewistown. I am here today to represent the Fergus County Farm Bureau of which I am currently president. This organization consists of over 430 families in Fergus County and some 5,200 families in the state. Almost all of these families are involved in agriculture.

Montana Farm Bureau has a policy pertaining to wilderness that is adopted by the members at the annual conven-

tions.

The Farm Bureau position is that management of pub-
lic lands is a responsibility of each generation and sound
conservation practices are of vital importance. Therefore, we
believe that the multiple use and proper management of public
A lands is in the public interest. The no-management concept of
wilderness systems has proven wasteful and detrimental to our
national resource in the past.

Farm Bureau feels that the management priorities of wilderness areas will inhibit sound conservation practices.

Under wilderness management, water and land resources
B will not be managed to their highest potential. This could
easily result in grazing rights being reduced from their pre-
sent level under multiple-use management.

Sound livestock disease control practices could easily take second place to a biologist's conception of wildlife management.

For an exception--for example, pour-on insecticide
use could possibly be curtailed or inhibited because of their
effect on birds, magpie population. Another possibility may be
C rabies outbreak in livestock wherein in management--wilderness
management system might not--might not agree with the routine
way of handling that in which you can go in and eliminate the
whole sector, generally skunks, but it could be racoon. Such
policies are usually implemented under the multiple-use manage-

ment system.

C Noxious weed control is another area that will probably be given minimal consideration under wilderness management.

The list of objections of Farm Bureau members to a wilderness area is lengthy and probably repetitive to further testimony that's going to be heard here tonight, so it is sufficient for me to say that Farm Bureau is enthusiastic in its opposition to wilderness areas.

Thank you.

MR. STARK: Mr. Gene Chapel.

MR. CHAPEL: Thank you, Mr. Chairman.

Here we are again--another hearing concerning land that mankind wants to turn into wilderness.

I'm Gene Chapel and I ranch in Fergus County. I'm also state vice-president of the Montana Farm Bureau Federation and am speaking for that organization which is made up of farm and ranch families who believe in preserving a quality life as well as helping the land feed and clothe people as the good Lord meant it to be.

112 A We are addressing two areas now but really they are not any different than the thousands of acres that have been dropped from inclusion in the Wilderness Act in the Missouri River breaks.

We are fully aware of the fact that the BLM was

instructed to survey and come up with areas that qualified for wilderness. The first inventory had thousands of acres that met this criteria or so the people believed that made this initial study.

A Well, history of the past two years has proved beyond any doubt that this land did not meet wilderness criteria.

One of these reasons is the fault of the Wilderness Act itself. It is open to as many interpretations as people that read it. Another reason that we are even considering these areas is because the people within the BLM that interpret and make rules have modified the game plan to fit the pro-wilderness side as we have been progressing with the studies.

B Let's not go out and attempt to reconstruct a wilderness area. Let's not make abrupt land changes that have been in progress for so many years. Let's not create obstructions that will make our great country weak because of the need of natural resources that may be in these areas. Let's not create a social and economic hardship in areas that have had an established lifestyle for many decades. Let's not tie the hands of the qualified land managers that the BLM has in managing these areas. Let's not put the good people that have put their heart and soul into this land out on their ears. Let's not deny this land to the hundreds of people that cannot use wilderness areas due to time, physical disabilities, age

and income for a valuable source of recreation. Let's not
B destroy the very sound and proven principle of multiple use and go to a single-use wilderness. Let's not overlook the roads, springs, reservoirs, fences and other improvements that have
C been made in these areas and call it wilderness for sake of something to do. Let's not throw the people off the land that are paying for the privilege of using it and put the burden of wilderness management on the taxpayers' back.

The two areas that are being addressed at this hearing, Cow Creek and Antelope Creek, are very typical of the areas that have been dropped. There are many points that should
D be considered that are definitely not wilderness qualifications such as state land in the center of Cow Creek that will have to have an access road, the roads that are already in existence, the spring developments and reservoirs that are in both areas,
E there is no way that the Cow Creek unit has manageable bounda-
F ries, the fact that both units have existing oil and gas leases that will come under the grandfather clause.

The economic impact of wilderness designation that
G the BLM has prepared, had prepared, by an outside consultant should be considered very heavily as this is a good piece of work from an unbiased position.

Oh, we may bellyache about these hearings and it does cost the taxpayers money and places hardships on the people that are affected, but I guess it does serve some good.

If nothing else, it makes us all more aware of the land and its uses. It helps all of us to possibly find a common ground where this great country can operate under a multiple-use concept. We all have a spot in this life and should be able to share and individually work for the good of all.

I'm certain that the people that have had the power granted to them to make determination on how the Cow Creek and Antelope units are to be handled will see the benefit to both the land and the majority of the people so they can manage this land under a multiple-use concept.

These areas are not bona fide wilderness areas so let's not try to make something of Cow Creek and Antelope Creek units that does not exist today.

I thank you.

MR. STARK: Mr. Will Brooke.

113 MR. BROOKE: My name is Will Brooke and I am here tonight representing the Montana Stockgrowers and Montana Public Lands Council, the Association of State Grazing Districts. You probably know all three associations welcome the opportunity to comment on the Missouri Breaks Wilderness Suitability EIS.

All three organizations are opposed to any more wilderness designations in the State of Montana. We feel that over 3,000,000 acres of single-use wilderness is enough for Montana.

We are opposed to wilderness for several reasons.
A Wildlife, including big game, cannot be properly managed with-
out hunting access. Wilderness protects noxious weeds which
B invade range and crop lands and harbors predators which prey
upon livestock.

Wilderness also eliminates any opportunity to
develop potential natural gas reserves and mineral deposits.
C At a time when this nation is trying to become energy inde-
pendent we find the consideration of wilderness foolish.

Finally, wilderness, as you point out in your docu-
ment, increases the cost to the livestock operator who utili-
lizes the public lands. Without motorized access, managing an
allotment can be time consuming and expensive.

Furthermore, financial institutions are becoming
D wary of lending to ranches which are dependent upon a permit in
a wilderness area. They, like ourselves, are unsure if the
public will continue to permit grazing in the wilderness when
the public decides that livestock are an extension of man and
are trammeling what is to be untrammeled, but enough generali-
zations. Let us look specifically at the proposals for Cow
Creek, Antelope Creek, Seven Blackfoot, Burnt Lodge and Terry
Badlands. We can only underline what your document so well
pointed out as resource conflicts.

Cow Creek. The area contains proposed range develop-
E ments which could increase benefits for wildlife and livestock,

something which would be precluded by wilderness. Also, it is
an area high in natural gas potential. Development of this
E resource could not only contribute to the tax base of the area
but alleviate a strain on our natural gas reserves.

Antelope Creek. The study admits U. S. 191
seriously impairs opportunity for solitude and that there are
F no singularly outstanding recreational opportunities. The only
rationale for partial wilderness seems to be that it is a
physiographic continuation of CMR's Antelope Creek study unit.

I respectfully submit you to the recent decision by
the Interior Board of Land Appeals from the eleven proposed
wilderness units in Nevada. The IBLA rejected the proposals
because the wilderness units could not stand on their own. I
G suggest Antelope Creek along with Seven Blackfoot do not stand
on their own as possible wilderness designations, encourage you
to look at the IBLA recommendation in Nevada.

According to the suitability study, Burnt Lodge is
detracted by activities on the north and east sides. These
characteristics affect the wilderness characteristics. Also a
H state section and private land tract presents a problem. We
oppose any wilderness designation which affects private or state
lands. If the Bureau is to propose such a designation it should
at least acquire by trade or purchase those lands before
recommending a wilderness.

I Finally, the Montana Stockgrowers, the Montana Public

I Lands Council and the State Grazing Districts oppose the Terry Badlands because the country by its very rugged nature is protected.

MSGA and the Montana Public Lands Council and Grazing Districts sincerely hopes that the BLM returns to its serious job of resource management for the production of food and fiber rather than the continual study of single-use management. We hope that Burnt Lodge, Cow Creek, Antelope Creek, Seven Blackfoot and Terry Badlands are recommended for non-wilderness in the final suitability study.

Thank you.

MR. STARK: Mr. Martin Udelhoven.

114 MR. UDELHOVEN: I am Martin Udelhoven. I have lived here in Winifred all my life and ranched here.

I oppose the wilderness area, Cow Creek and Antelope Creek, because of the fact that I don't think they meet the criteria for wilderness. They have fences, dams, springs, roads, and so forth, in them, but one of the biggest things I think is the fact that making those wilderness areas is a very serious case of discrimination. It's setting aside some land for the minority instead of leaving it open for all people to use.

A lot of people who come out here want to go sightseeing, taking pictures, hunting or anything like that. Unless they can hike in or can ride a horse in they are eliminated. A

lot of people come out here. Maybe they can't come west to see the sights out here until they have retired. They are no longer able to walk into those areas and if they can't ride a horse they are just eliminated.

That's the main thing I have to say and thank you.

MR. STARK: Mr. Don Simpson.

115 MR. SIMPSON: My name is Don Simpson. I am with Fuel Resources Development Company. I am the supervisor out of Havre.

As a mineral exploration company, we are opposed to what still appears to be very large random withdrawals of public land from mineral exploration.

In the past--in the two areas of particular interest to us, Cow Creek and Antelope Creek, we note several discrepancies in how a wilderness area could or would be managed.

A First, in the Cow Creek area most of the mineral leases and the mining claims are on pre-FLPMA leases which if we understand correctly can be and probably will be drilled on without any special consideration of wilderness. This would be in keeping with the Solicitor's opinions and lease guarantees granted when these areas were leased. The same problems would also exist in the Antelope Creek unit as a large area is also covered by pre-FLPMA leases.

Second, if the BLM should decide to handle the mineral leases differently than you have in the past even

though they are pre-FLPMA what effect would this have on the
operators who hold the leases? Will drilling and gathering--
A will drilling and gathering lines be affected? Will operators
be allowed to maintain roads to the wells if they are productive?

Thank you.

MR. STARK: Cleo Phillips, please.

116 MS. PHILLIPS: Hello. My name is Cleo Phillips, and
I live just north of the Cow Creek and Antelope Creek areas
that are under consideration for wilderness, and according to
Webster's definition wilderness is an uncultivated or uninhabited region. The name itself suggests there will be no multiple use in these areas.

For thousands of years man has been learning to live
with nature. Our government has spent millions studying every
species of wildlife, birds and fish to come to the conclusion
A that man is the intruder of nature. This then lends to the
thought that man must be stopped. What a ridiculous, narrow-minded attitude.

America, the name itself, suggests freedom. We are
the only country in the world that raises enough food for our
people. Every day we are trying to be free of foreign dependency on oil, and still there are people that would set our land
aside and let the weeds take the place of grass, willows take
the place of farm land and deer and elk the place of cattle and

A sheep and restrict all exploration for energy. They can sit
back and say, wow, didn't we do a great job.

Now, if you are young and healthy and strong
enough to walk miles into the wilderness you can enjoy it. To
B hell with old people who like to drive out for their recreation
or the crippled that can't enjoy it. To hell with the deer
and elk who also enjoy fresh vegetation. Let them scrounge in
the weeds and deadfall for their food.

My family has lived in this area for four generations as my grandfather came here with Pike Landusky from
Missouri when he was twelve years old, my husband's family
even longer as his great grandfather was B. D. Phillips, the
namesake of Phillips County. What is now wild and scenic river
used to be occupied by many people. The river bottoms at the
time were ninety-five percent occupied by farmers and ranchers.
C It is some of the richest farm land in the State of Montana,
growing hay, wheat and alfalfa seed in abundance. Now it's
grown over with weeds, willows and deadfall. It isn't even
decent grazing for wildlife.

The Government has as geologist Carter Hern.
He has discovered numerous diamond formations, many oil and gas
D deposits. He also states that the geothermal potential for our
area is excellent.

I think you can safely say the farmer and rancher
have taken excellent care of this area or there wouldn't be any

question of it being considered for wilderness. Let us continue to care for the land as we have in the past, continue to produce food and energy for future generations without government control or wildlife restrictions.

MR. STARK: William E. Williams.

117 MR. WILLIAMS: My name is William E. Williams. I was born and raised on the land now under consideration for wilderness. My grandmother, Mrs. Elenore Kolczak, came to this country when she was fourteen years old, several years before the Homestead Act. She raised nine children, my mother being the oldest.

My mother and father homesteaded the place that I now live in 1911. I have continuously lived here for the past sixty years. I still reside in the house that I was born in.

In those days the grazing was wide open. The biggest and the strongest had the best and the most. Several years later the BLM came into the country and allotted the people on the land the grazing according to how much deeded land they had and how much hay that was raised. Fences were erected and the abuse of the land stopped. Now you could protect what land you used. The BLM has done an excellent job of management under a multiple-use concept.

In my sixty years I have never known any problems with the hunters, campers or just sightseeing visitors. The rancher and the people using the land for recreation have

always gotten along. The people seemed to respect the rancher's
use of the land as well as the rancher respecting recreational
use. It seems more old people enjoy the land now for rock
hunting, camping and et cetera now than would if the roads were
A closed to vehicle travel and it was restricted to hiking and
backpacking. This seems that it only gives access to young
and strong people.

The many roads in the area are not only useful for recreation but serve a definite purpose for the rancher in his business of checking reservoirs, cows, range condition and predators--also for distributing bulls and salt and repairing fences.

The BLM has done some fine improvements in the area
B of water throughout the country. They have built and repaired
many reservoirs in the area to help evenly distribute the cattle
and wildlife so none of the land is damaged, as it is in
everyone's best interest to keep the land in the best of condition and the water fresh and plentiful.

The Missouri River breaks country is definitely a
wonderful place for raising cattle, as here we have the
healthiest cattle in the United States due to the abundance of
C and variety of vegetation in this area. The cattle are free
of disease and deficiencies, have excellent growth and fine
heavy hides.

When there was farming on the river bottoms there were a great many more deer, elk and birds than there is now because the wildlife also enjoy fresh vegetation. During an occasional bad winter the wildlife were sustained by the many haystacks there also. There have been times the hay was the difference in survival to them.

The minerals in our area are plentiful also. During the Thirties when cattle prices were at an all-time low the many ranchers in the country worked at the mines to supplement their ranches. At no time did we ever have government subsidies on our cattle. There were no soup lines or give-away programs ever required here. The rancher has used the land to his and the land's best interest always looking toward a better tomorrow, better cattle, a better living and rich land to help pay for them.

For many years the coal from the breaks supplied the mines in our area and many families from the south Blaine and Phillips Counties.

We are proud to be ranchers and proud of the land and our cattle. None with such an attitude would harm the land he so depends on. A multiple-use concept seems to me the only use of the land and not the waste of wilderness.

I thank you.

MR. STARK: James E. Hill.

118 MR. HILL: I am James Hill. I live here in Winifred. I am presently running for Fergus County commis-

sioner. I am opposed to anyone in a region such as ours taking on the responsibility of the ranchers in keeping up the value of their land on which they make money and stuff. Here is $933,000 that the BLM alone says it's going to drop in value. That's quite a little to lose.

Then look at the hardship that's going to put on these ranchers also when they can't go out to look at their cattle and drive down these roads where they want to maintain their cattle and their fences. It just don't look very right to close these areas.

Then another thing we should look at it's a multiple use now and if we close all these roads it isn't multiple use anymore. There are very few people are going to get to use it. It's going to be left to the rich and then after the rich get there it isn't long till they are going to close the cattle. They will have some more hearings and the cattle will be put out, won't be allowed in there anymore. It's an easy step to take, so I think as cattlemen we have got to stop this or there won't be no more use on these wilderness areas. It's just a matter of time.

And then I don't like the way they say this one thing vehicle ways. All these ridges that got roads on them, what's a road? A vehicle way. It's an easy way to say there is no more use of it. They are just trying to shut us out, and I don't like it and I don't think the rest of us should.

E Then I will go to something else. I live close there to CMR. I have seen how they run theirs, and the noxious weeds are taking over down there, and if we put this in wilderness area the same thing is going to happen again. The BLM isn't going to be out spraying.

Right now they are not doing a real good job. There is white-top down on my ranch and they are letting it go, and I come from the Judith Basin where there is a lot of spurge and white-top and things like this, and we don't want them around. They will let these weeds take over. It's just not good for the country, and I have seen what they can do.

F Then also our gas and oil leases--I think we have got to look at some of this, too, with the way the economy is and stuff to produce our own stuff here, so I can't see how the BLM wants to keep putting money, what we don't have, into more studies when this isn't wilderness. Coming from another part of Montana over here from Judith Basin, coming here a year and a half ago, I have had a chance to look around and I haven't seen any wilderness yet. I have been told there is wilderness over here. Maybe I will see it one of these days, but I haven't yet.

And thank you.

MR. STARK: Louise Butcher.

119 MS. BUTCHER: I am Louise Butcher of Winifred, Montana.

Since 1961 I have been concerned about the wilderness studies in this area. Then we were discussing what to do with the Missouri River in this part of Montana. That has been settled now with sixty-four miles of wild areas on both sides of the river scattered from Ebersole Bottom, which is fifty-two miles from Fort Benton, to the Charles M. Russell Wildlife Range. That is sixty-four miles of wilderness in ninety-seven miles. The tracts for consideration at this time, Cow Creek and Antelope Creek, are not many miles from the boundaries of the Charles M. Russell Wildlife Range's one million acres.

A If they do receive a wilderness designation, it will be the privileged few, as you have heard here many times before tonight, who will be able to enjoy it either because of the cost, the time involved or the inability of many to withstand the rigors of this kind of backpack vacation. Montana has approximately two million acres of designated--I heard here it was three; maybe it is three--wilderness lands already. Large areas of Glacier Park qualify for wilderness. I am opposed to adding more.

B You say that grazing will not be restricted, but one has only to check with those who graze on the Charles M. Russell Range to see how their allotments are being cut. I stated in 1961, and I will say way back there, what is that, twenty-one years ago, that I think some of the people were kind of--thought I was silly, but I said, "If the shortage of grass necessitates a choice between the cows and wildlife, the cows will be the first to go." That is just what is happening now on the Charles M. Russell Wildlife Range.

B It appeared in an article in the paper, and I should have cut it out at the time, but somebody from the Secretary of Interior's office, some woman, came and saw the Charles M. Russell Wildlife Range. She said, "You know, I don't think there should be any cattle on this range." I am sorry that I don't have her name and clipped it out.

In the areas presently under study here, I understand that there are ridge-top roads that have been used from the beginning. These cannot be ignored.

There are twenty-eight ranchers who are using this land right now. It is time to let the resident ranchers get on with the business of raising food without the threat of wilderness interference. I urge that this area not be designated wilderness because it is already part of ranch operations.

MR. STARK: Garde Peterson giving testimony for William D. Ross, Secretary, Montana Land and Mineral Owners Association.

120 MR. PETERSON: I am Garde Peterson. I am giving testimony for the Montana Land and Mineral Owners Association of Chinook, Montana.

"As Secretary of the Montana Land and Mineral Owners

Association, I have been requested by the directors of that association to present the following comments in regard to the suitability of the Cow Creek and Antelope tracts in the Lewistown District being classified as wilderness.

"Since February of 1978, when the Bureau of Land Management first inaugurated their study as to the suitability of certain tracts of federal land to be classified as wilderness area, our association directors and members have presented written comments and presented their views at public meetings which pertained to any changes that would affect them if these tracts were put in a wilderness classification. From the start our directors and members were in favor of a multiple-use concept in regard to federal lands. In our particular area, it was our belief that a wilderness classification would greatly restrict the concept of multiple use.

"At this time, June 15, 1982, it appears that many people as well as BLM personnel agree with this multiple-use concept with the result that a number of tracts formerly studied have been dropped from further wilderness study according to the final draft of the Missouri Breaks Wilderness Suitability Study.

"In our particular area, there are still two tracts, namely Cow Creek and Antelope, being considered for wilderness classification. It is our opinion that these two tracts be dropped from further wilderness study. The Cow Creek tract does

not qualify for naturalness for the following reasons: One.
This tract does not meet the criteria of a wilderness area from
A the standpoint of naturalness. It certainly shows the imprint
of man's work when one sees the reservoirs, vehicle trails,
short stretches of fence and several gas drilling sites.
Number two. There is some hunting in the fall. We rather
question whether primitive forms of recreation such as backpacking,
horseback riding and rock climbing are carried on to
any extent in the area. Number three. From the concept of
multiple use, ranchers who live in the area have leased some of
these proposed wilderness tracts from the BLM. These leases
B have provided lease money to the BLM and has also helped the
ranchers maintain an economic unit for their ranching operation.
Number four. Along the same line of multiple-use concept is
the possibility of further development of natural gas in the
area. With some ninety producing gas fields in Montana in
1981, the Leroy field, adjacent to the Cow Creek tract, is the
seventh largest producing natural gas field in the state with a
C production of 91, 711 MM cubic feet of natural gas. With over
ninety-one percent of the Cow Creek tract leased for gas, it
certainly does not seem that any of this tract should be classified
as wilderness which would eliminate further exploration
for natural gas. Geologists rate Cow Creek tract potential for
natural gas very high.

"Antelope. The Antelope tract joins the Cow Creek

tract on the east. We would recommend a no-wilderness alternative which, as we understand it, is to leave this tract pretty much as it is now as far as regulations are concerned. Livestock grazing would remain as it is now. We believe present regulations are strict enough to prevent any damage to wilderness values.

"In the north part of the area there are several reservoirs and a number of ridge roads. In our opinion, any type of so-called primitive recreation has been and will be very limited. The tract also has a high rating for possible natural gas production.

"We hope you will give our comments consideration. Thank you."

It is signed by William D. Ross, Secretary, Montana Land and Mineral Owners Association, Chinook, Montana.

Thank you.

MR. STARK: Lorraine Schwenke.

121 MS. SCHWENKE: My husband, Charles Schwenke, and myself, Lorraine Schwenke, oppose Cow Creek and Antelope Creek units being designated wilderness. These units are presently very successful multiple-use areas.

We realize wilderness is a controversial issue, but there is evidence that the majority of the American people do not understand what a wilderness is or what wilderness management policies are.

The Wilderness Act states that wilderness areas be managed to provide for the preservation of the wilderness character and that they not be affected by man or man's work. In these two units there is outstanding evidence of man and man's work. There are eleven man-made reservoirs dating back to the early nineteen hundreds and as recent as 1981 with all types of modern equipment being used to construct and maintain them. There are approximately thirteen miles of fence and over eleven roads, trails and roadways.

We have produced documents, testimony of these roads having been built and maintained by man. These units are used by ranchers, hunters, mineral development and recreationalists. These units have grazing programs on them that require the use of the reservoirs, fences and roadways to operate profitably.

The 95th Congress became disturbed about the problems grazing leases were encountering. Despite new language and a history of fifteen years in providing guidance to wilderness management agencies, National Forest regulations and policies were acting to discourage grazing in wilderness or unduly restricting activities necessary for proper grazing management.

Designating these areas as wilderness could reduce the borrowing power of the ranchers involved putting undue strain on their already marginal budgets.

These units are high in mineral deposits. Geology surveys indicate diamond formations, coal and vast wealth of

natural gas. At present over eighty percent of these units are leased with a high probability of development.

These monies, tax monies, and the monies from the products produced is now an income to our locality. Every community that can't support itself should be of utmost importance to our government. It does not seem like good management policy for our government to keep taking more land out of production.

In the past fifteen years or so there has been an overwhelming push by environmental groups to lock up the land and turn their heads on development. It seems we have been victimized by some environmental extremists. As one spokesman stated, it seems we would destroy an economically-productive area in order to provide hiking for an elite group of preservationists.

We agree it is important that we should protect scenery and recreational land, but we must remember that people are ecology, too.

We feel the multiple-use concept presently employed in these units has been very successful. Through supervised management policies, these areas have been utilized, yet successfully preserved. Under wilderness policy there appears to be no strong program for land management. Moreover, it appears to be a department for enforcement of regulations that restrict the economical productivity of the land. A program of

non-use does not necessarily guarantee preservation, as we
have witnessed on some areas that became deteriorated due to
poor water distribution, no control of disease, over-
population of certain species and over-growth of brush and
weeds. We have seen these areas that the wildlife is driven
onto the neighboring developed lands to get food. The
wilderness advocates propose that these units are needed to
insure an ecological balance. This seems an unjustified
G request as there are already over one million acres designated
in the CMR that adjoins these units and contains the same eco
types. Management policies of CMR will certainly insure the
naturalness of these lands.

Portions of the Cow Creek and Antelope Creek are
already protected by the Wild and Scenic River Act. The
H boundaries of these two units pose a management problem in that
they are so erratical. It would be virtually impossible for
anyone to know for sure if they were on wilderness or adjacent
land.

The Cow Creek unit is surrounded nearly on all
sides by private land. Access from the Missouri River is
nearly non-existent due to the private land holdings along the
I river. Impact on these private lands due to wilderness could
cause long-term conflict with land holders. These are
productive units presently being used and preserved by well-
managed programs, and we see no justification in designating

them as wilderness.

Thank you.

MR. STARK: Dick Knox, please.

122 MR. KNOX: My name is Dick Knox. I am President of the Missouri Breaks Multiple Use Association, and before I go any further tonight I would like to just say something about somebody that isn't here. His name is Ken Bauer, and he was a director of our organization and a power and a strength to all of us, and we buried him yesterday. I would like to dedicate my testimony to Ken.

First I would like to express our appreciation that these hearings have come to the locale where the studies of the proposed wilderness areas have taken place. This is a most refreshing change from past practice of holding hearings in cities far distant from the areas most affected and isolated from local concern.

I think a brief review of the study process to date is in order at this time. On October 21, 1976, Congress mandated that all public lands would be inventoried for their wilderness potential. This was called the Federal Land Policy and Management Act. Our organization certainly finds no fault with this Congressional mandate. We do, however, take strong exception to some of the criteria used in the inventory process.

The Wilderness Act of 1964 states that these areas shall be roadless. It was clearly the intent of Congress that the areas to be placed in the wilderness system should be roadless and they certainly should be undeveloped.

The Bureau of Land Management was given the task of conducting the inventory, study and reporting processes on those lands under their jurisdiction. Here again our organization certainly has no objection. The BLM has the trained personnel and the experience to conduct such an inventory. We do object most strenuously to some of the criteria that has been used in the inventory process. I want to make it very clear at this point that our organization does not place the blame for this problem on the BLM personnel in Montana who both supervised and carried out the inventory of the proposed wilderness areas. They have simply been following policy set forth in the inventory handbook.

The definition of what is or is not a road is of great concern to us and has had a major impact on the decisions placing Cow Creek and Antelope Creek in recommended status. The inventory handbook states that a road maintained solely by the passage of vehicles does not constitute a road. This not
A only is contrary to logic. It is clearly discriminatory to areas such as Cow Creek and Antelope Creek. Both these areas possess long, relatively flat ridge tops some of which run for miles. The first settlers in these areas, the cattleman and homesteader, naturally used this type of terrain to develop access roads throughout not only Cow Creek and Antelope Creek

but all the Missouri River Breaks area as well. These roads have been used continuously since the early nineteen hundreds by cattlemen, farmers, miners, woodcutters, trappers and in more recent years by all these groups plus BLM personnel,
A energy companies, sportsmen and hunters and by people who just simply want to view the area, take pictures, visit old homesteads and so forth. The list is long. The point is obvious. These roads are roads. They have a major impact on the wilderness quality of the area. Yet by a stroke of the pen they have been reduced to something called a vehicle way.

A vehicle way according to the wilderness handbook cannot detract from the wilderness quality of an area. This is pure nonsense and surely runs contrary to Congressional intent when they passed the Wilderness Act of 1964. The irony in all this is that the wilderness advocates of the Fifties and Sixties who are responsible for this type of discriminatory language are the same ones who were fond of saying and I quote,
B "Only God can make a wilderness area. Man can only destroy it." With that statement we are in full agreement, because man's activities do indeed destroy the wilderness qualities of an area. If this were not true the entire State of Montana would qualify for wilderness designation. Now the wilderness advocates are saying that man can create a wilderness area simply by ignoring the man-made impacts in that area. Our association does not agree and we are confident that Congress, the ultimate

judge on Cow Creek and Antelope Creek, will not agree either.

The next item of great concern to us is the cherry-stem policy. This ingenious policy has been used to eliminate roads from a study area simply by drawing a line around it on the map. The road, of course, is still there such as the winter ridge road in Cow Creek, penetrating to the very center of the C proposed wilderness area. This type of policy and the distinction that has been made between vehicle ways and roads is an obvious, transparent attempt to create wilderness where it has not existed, as in the case of Antelope and Cow Creek, for over seventy years. Were it not for these criteria both areas would have been dropped following the inventory stage.

The fact that off-site intrusions could not be considered in evaluating the wilderness quality of an area is a very questionable approach to wilderness study. In the case of Antelope Creek a major highway is within hearing distance and a D brilliantly-lighted gold mine looks down on the entire area. These intrusions will remain and are certainly not compatible with the stated goal of providing the opportunity for solitude and a wilderness experience.

The boundaries of Cow Creek and Antelope Creek for the most part follow legal subdivision lines rather than E natural boundaries. In the rough, broken terrain of the breaks wilderness users would be totally unable to know whether they were in the wilderness area or trespassing on private land.

E The only solution is extensive placement of signs which would greatly detract from the wilderness experience of the user.

There is one very large problem concerning wilderness designation for Cow Creek and Antelope Creek that has not been addressed in the study phase. This is the fact that both F Cow Creek and Antelope Creek are largely covered by pre-FLPMA oil and gas leases. The implications regarding wilderness quality are potentially devastating.

Pre-FLPMA lease holders have the right to select their location, drill and then if they hit a producing well have the right to put in a pipeline by the most logical route. This drilling and production activities with the necessary roads would eliminate whatever trace of wilderness quality left in both areas. This is not a hypothetical situation. Independent geologists rate gas potential in both areas as very high. The Bureau of Land Management in their own study have done the same. There certainly will be drilling activity. Chances of production are rated as very good.

It is quite apparent that because of flawed study criteria the Bureau of Land Management has been placed in the tenuous position of recommending for wilderness areas that not only are heavily roaded, have major off-site intrusions, have very difficult boundaries, that in all likelihood will be drilled and developed for gas even if Congress should follow their recommendation and designate Cow Creek and Antelope Creek as wilderness.

G

What would be the effect on the ranchers who hold permits in Antelope and Cow Creeks? I will now be quoting from an economic analysis of wilderness designation done under contract for the Bureau of Land Management by Dr. Leroy Luft, former extension economist for Montana State University and now owner of his own consulting business. Dr. Luft is perhaps the best qualified individual in the state to evaluate economic impact on area ranches due to many years of work with ranch economics all over the state. Dr. Luft obtained policy statements from the major long-term and short-term suppliers of agricultural credit in the State of Montana, first the Federal Land Bank, Mr. David Clowes, manager of Federal Land Bank of Glasgow, and I quote, "Our current policy in regard to BLM land, in connection with deeded land, is based on present market value of which we lend an undetermined amount depending upon the financial condition and the cash flow of the operator. We normally lend somewhere in the sixty percent area. However, I feel that we must treat wilderness-designated areas somewhat in the same light that we are currently treating land on the C.M.R. That is we do not value that grazing for the purpose of the loan." Now I quote Mr. Luft, "The significant portion of the response from Mr. Clowes is that his association would not place a value for lending purposes on any land in a designated wilderness area. This could have a very severe economic

impact on a producer that recently purchased land that would now be placed in wilderness. His resale could be such that his equity in the entire operation is lost." Federal Land Bank associations are the largest holder of real estate debt in Montana. They presently hold just over thirty-six percent of real estate debt outstanding.

G

Farmers Home Administration. "The policy"--and I quote. "The policy of the Montana Farmers Home Administration now is not to place any security value for lending purposes on those portions of public land that are contained within a wilderness area." They further state, and I quote, "The FHA has had a great deal of experience with large grazing associations and is concerned that grazing cutbacks could destroy the repayment ability of the association members.".

Now we'll examine response from short-term lenders. Production Credit associations hold thirty-one percent of all non-real estate debt in Montana. I now will quote the response of Mr. C. L. Bud Zormeir, manager of the Lewistown Production Credit Association. Mr. Zormeir indicated that when evaluating an operating loan for a rancher he would decrease the value of the property for security purposes and consequently loan less operating money if the unit contained public land with a wilderness designation. He stated he has the approval and support of his local board for this policy. He pointed out that a lender must evaluate all loans from a long-term point of view.

He also felt that most lenders would not view current wilderness grazing policies as sufficiently long term and subsequently would loan less to the borrower.

The implication of the response from the lending institutions is obvious. Adequate credit with livable terms are the lifeblood of a present-day ranch operation. Without it they cannot operate and would be forced to liquidate their property.

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Now let's examine what happens when they place that property on the market. Dr. Luft contacted Mr. Harry Johnson, Realtor for Montana Land and Associates, Billings, Montana. Mr. Johnson indicated that in his experience the mention of wilderness possibilities tended to scare people away. They are very cautious and are reluctant if it is a study area. He indicated he has shown a place with this situation but has not had any success in selling it. The implications of this response are so obvious it bears no further comment.

I now quote the last paragraph of Dr. Luft's summary on ranch market and mortgage values, and I quote, "Wilderness designation, depending on the particular situation, could cause an equity reduction for the affected rancher. If lenders feel they would have to loan less, this would have a direct impact on the equity a producer has in the operation. This could be particularly stressful for the producer who has made a recent acquisition. It would be more financially devastating on the

low-equity young producers just attempting to get started."

G

I would like to point out again that this economic analysis was commissioned and accepted by the Bureau of Land Management and is part of the permanent record on Cow Creek and Antelope Creek.

The Missouri Breaks Multiple Use Association is a true grass roots organization. We are comprised of ranchers, townspeople, sportsmen, miners, businessmen--in short a true cross-section of Central Montana. Included in our membership are the permit holders from every area proposed for wilderness inventory or study on both sides of the Missouri River from above the PN ferry on the north side to Robinson Bridge and from the PN ferry nearly to Robinson Bridge on the south side.

We believe in the multiple use of public lands, as the name of our organization implies, for all segments of our society. I will quote from the minutes of our August 14, 1981 meeting when the following paragraph was voted into our by-laws. "The Missouri Breaks Multiple Use Association supports the concept of the Wild and Scenic River Act as it is being implemented and the recreational use that is being made of the Missouri River."

In closing, let me state our belief that the present multiple-use management between the Bureau of Land Management and ranchers and the general public on Cow Creek and Antelope Creek is working well. These lands are presently in multiple use and everyone from wildlife groups to wilderness advocates who have toured them and viewed them firsthand agree that the combined stewardship of ranchers and Bureau of Land Management has kept them in excellent condition.

We do not believe they should be removed from multiple use. We do not believe that man can create wilderness. Again let me express our appreciation for holding this hearing at the grass roots level.

MR. STARK: Edward Butcher.

123 MR. BUTCHER: Thank you.

Ladies and gentlemen, for the record I am Edward Butcher. I ranch east of Winifred.

I think most of the basic problems as such have been pretty well covered and I am going to take a little bit different look at this tonight. I think the concept of preserving the past is certainly a noble and an important concept. As our nation covers millions of acres with asphalt and subdivisions, people in America yearn for the great solitude of wilderness and seek the fantasy of the American frontier.

True. Montana and a few other portions of Western America were the last embodiments of frontier historian Frederick Jackson Turner's frontier thesis, that it was America's advance westward against the wilderness that stamped America as a nation and Americans as unique people.

As a former professional historian and a student of

the American West, I can appreciate efforts, nostalgic efforts, to preserve for the future bits of our heritage. However, as a professional historian who has returned to my roots in northern Fergus County, I have analyzed the entire issue of making portions of this region into a wilderness area and find, for example, that it is not possible to reconstruct the atmosphere which the advocates seek.

I have spent hours riding through the Missouri River breaks horseback. I can only tell you one thing and that the effort is seventy years too late, too late to preserve the Lewis and Clark environment as the people dream of. Even though this was the last portion of America hit by the wave of sodbusters it was completely engulfed and its marks cover the landscape. Even though the homesteaders removed or have moved and in many cases and the population has drastically shrunk from the original thousands who swarmed over the land to only a few hundred, there is no way to stretch the wilderness guidelines, BLM's own wilderness guidelines, to apply to this region, because of the terrain and location. Because of terrain and location this region rests in the middle of the 20th century America from which you cannot escape. The air is clear and the noise of vehicles and machinery is clearly audible and on still fall days you can hear people talking for
A miles. At night the lights of farms and vehicles appear all around you and certainly the lights of the twenty-four-hour

mining operation in the Little Rocky Mountains east of the proposed areas leap out at you for fifty miles.

To emphasize the point further that this is beyond wilderness designation one only has to look at the fact that there are currently over twenty man-made water developments, A dozens plus miles of fences, gas wells, power lines, et cetera, in the area as reported in BLM's own inventory. How can you classify an area as wilderness which is in the middle of an agricultural area and currently used by over twenty ranchers with miles of roads made by pickups and other vehicles throughout the area? We are not saying that the area should be greatly altered and actually there is little more development conducive to the area except for some mineral exploration.

The practical approach is for multi-use of the region so all can enjoy the beauty of the area, not just a few backpackers. I realize many people who come to the area have a first impression of isolation. Obviously, if you are in the middle of Washington D. C., as I have been a few times, it seems pretty isolated out here, but if they stop and spend some time analyzing the area they quickly realize that the area really does not fit their own definitions of wilderness.

In conclusion, there are obvious areas of Montana which are isolated and perhaps are conducive to wilderness but because of the close proximity to ranchers and the noises and other activities of civilization it really, folks, doesn't make

much sense to designate Cow Creek and Antelope Creek as wilderness and, of course, last but not least to the local area to put this into a wilderness is going to have untold economic-- B economically-adverse effects on our economy.

I thank you.

MR. STARK: Thank you.

Mr. Robert Bold.

124 MR. BOLD: I am Robert Bold.

When I came in the door they gave me a card and said print your name. We have thirteen speakers. You are the fourteenth one.

Over the years--I am not a long-term resident here of Winifred area, but I have been a resident of the Wind River Basin, and over the years the quality of wildlife in these areas has improved and it's not been from leaving the areas isolated or untouched. It's been largely through a slow, con- A tinuous process of improvement that man has taken on over the years. It has made these areas better watered and the number of wildlife that come off of these I am sure is a lot more than when--in any given year when Lewis and Clark floated the river or went down the river back in the eighteen hundreds.

The BLM, if they were given more leeway, I am sure B would do a better job of managing and promoting improvements and promoting production on these lands, so in addition to multiple-use program rather than require wilderness on these

B areas I think there is more of an effort needed on an improvement program.

Thank you.

MR. STARK: Beth Bergum.

125 MS. BERGUM: I am Beth Bergum. My husband and I have lived and ranched in the Winifred area for over thirty years.

My home is in an area much like Cow and Antelope Creek, so even though I am not familiar with these particular areas I am very well versed in what is and what is not wilderness and am very aware of the pros and cons of the proposals.

I have worked for a school district for twenty-five years and in this capacity I am in contact with tax bases and their effect on the general government income and, more particularly, their effect on local school systems.

In both Blaine and Phillips Counties, I am sure cattle tax revenues account for a good portion of the tax collections. I firmly believe the implementation of a wilderness area will errode the tax revenues of the cattle industry and through a domino effect the economy of the whole area as A cattle income to the ranchers suffers. Add to this the definite possibility of gas development which, of course, adds tax and economic dollars, and the total economic effect on this area becomes a very real factor that should be considered.

Montana is at present considering a restructure of

the school foundation program to better equalize the tax burden for schools. If this is done, wilderness-designated areas would ultimately have not just a local but a statewide adverse effect.

In a very much more personal manner, again speaking of the area I know but also applicable to Cow Creek and Antelope Creek, I resent the implication that wilderness designation will preserve for future generations, will protect or will give the public greater access. This is very simply not true. The areas have been and will continue to be well preserved by the people who use the land. It is to their advantage B to be conservationist. Even proponents of wilderness who have toured these areas have been reluctantly forced to admit that the cattleman has been a good and faithful caretaker, and these tours were made during times of extremely dry conditions. The wild and domestic animals share a home here as they do on our private holdings.

If the land is publicized as a wilderness for hikers, C horseback, campers, then I feel the chances of degradation are greater than under our present multiple-use concept.

The consideration that has bothered me the most throughout the entire wilderness proposal concept has been the D lack of access to so many, many people by wilderness designation. I quote from the Missouri Breaks Wilderness Draft of May, 1982. "Wilderness designation would mean some vehicle-dependent individuals, especially the elderly, the handicapped and those relying on vehicles for recreation would be prevented from using vehicle ways or traveling off road in the twelve WSA's. Hunters using vehicles to retrieve game would be especially affected." The only people who will be allowed to share in the areas must be physically fit. No more will people who cannot walk or ride horseback for miles be privileged to enjoy the beauty of the breaks. I could not begin to count the number of people we have taken through the breaks and the enjoyment they and we have experienced. Of course, wildlife shot in any type of inaccessible place will simply be left. Most hunters will not retrieve game under these circumstances.

In conclusion, as so many of us have said so many times, multiple use works. It has and it will for now and for future generations.

MR. STARK: Thank you.

Is there any other person present that wishes to make a statement? If not, I will declare a five-minute recess and then we will reconvene and close out.

(A recess was then taken.)

MR. STARK: I would like to reconvene this hearing now. We are reconvening this at 9:12.

Closing the record, I would like to remind you that the testimony received at this hearing will be available in the form of a transcript and if you wish to receive copies of this

transcript please leave your name and address with the court reporter.

You are also reminded that all testimony will be analyzed by the Lewistown District manager and a written record of that analysis will be prepared and will be available for inspection at the Lewistown and Miles City District Offices. The analysis of this testimony will be used to determine what changes, if any, are required in the wilderness suitability recommendations.

The final recommendations will be forwarded to the President following concurrence and signature by the Secretary of the Interior.

The hearing is closed. However, the record shall remain open until July 26, 1982. We urge you to contact those who could not make it to this hearing and have them submit their written comment. The BLM people will stay a while to answer any particular questions you may have, and I appreciate all of you for coming and providing us with your testimony, and the hearing is closed.

(The hearing was then concluded at the hour of 9:15 p.m., this 23rd day of June, 1982.)

This is to certify that the attached proceedings before the United States Department of the Interior, Bureau of Land Management, in the matter of a public hearing for the Missouri Breaks Draft Wilderness Suitability Study Environmental Impact Statement, at the Winifred High School, Winifred, Montana, on Wednesday, June 23, 1982, were held as herein appears and that this is the original transcript thereof for the file of the Department or Commission.

Certified Shorthand Reporter
and
Registered Professional Reporter

UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

COPY

- -

PUBLIC HEARING FOR WILDERNESS AMENDMENT/
ENVIRONMENTAL IMPACT STATEMENT
FOR THE DILLON RESOURCE AREA

- -

Taken at the Jorgenson's Motel
Helena, Montana
Thursday, June 24, 1982 - 1:30, 7:30 p.m.

RECEIVED
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Bureau of Land Management
Dillon Resource Area

Reported by Julie Martin Lake, CM, RPR, CSR, Official-Freelance Court Reporter for the State of Montana, residing in Missoula, Montana.

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HEARINGS OFFICER: BUD LEE, Montana State Director's Staff.

BLM REPRESENTATIVES:

BRUCE BOTSFORO, Project Manager, Oillon, Montana.

OAVE LITTLE, Assistant District Manager, Lewistown, Montana.

DICK COSGRIFFE, Area Manager, Oillon, Montana.

BUCK OAMONE

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THURSDAY, JUNE 24, 1982

Whereupon, the following proceedings were had and entered of record:

HEARINGS OFFICER: I think I will go ahead now and open the hearing so we can get it on the record at this time.

This is a public hearing for the Wilderness Planning Amendments, Environmental Impact Statements for the Dillon and Missouri Breaks Areas. The Bureau of Land Management recently completed Draft Wilderness Planning Amendments and Environmental Impact Statements for twenty Wilderness Study Areas in the Butte, Lewistown and Miles City Districts of Montana. The twenty Wilderness Study Areas include a total of two hundred sixty-four thousand six hundred nine acres of public lands. The draft documents were mailed to all known interested parties on May 10, 1982.

In the Dillon area, the BLM proposed wilderness designation for twenty-seven thousand two hundred eleven acres of public lands located in portions of three Wilderness Study Areas. Ruby Mountains, Blacktail Mountains, and Farlin Creek, and nonwilderness for sixty-seven thousand one hundred ninety-eight acres of public land located in the remaining portions of the above Wilderness Study Areas and the other five Wilderness Study Areas.

A total of fifteen thousand six hundred fifteen acres in the Ruby Mountains Wilderness Study Area and ten thousand

nine hundred eighty-six acres in the Blacktail Mountains Wilderness Study Area are recommended for wilderness. The Farlin Creek Wilderness Study Area proposal recommends six hundred ten acres for wilderness designation as a tack-on to the Forest Service's proposed East Pioneer Wilderness and transfer of management authority to the Forest Service if the East Pioneer Area is designated wilderness.

If the Forest Service unit is not ultimately designated as wilderness, Farlin Creek is not a viable independent candidate for wilderness status. If the five remaining Dillon vicinity Wilderness Study Areas, East Fork of Blacktail Deer Creek, Hidden Pasture Creek, Bell and Limekiln Canyons, Henneberry Ridge and Axolotl Lakes are recommended as nonwilderness.

In the Missouri Breaks Amendment, the preferred alternatives recommend wilderness designation for Burnt Lodge, thirteen thousand eight hundred fifty acres; portions of Cow Creek, twenty-one thousand five hundred ninety acres; and Antelope Creek, nine thousand six hundred acres in the Lewistown District and portions of Seven Blackfoot, five thousand seven hundred ten acres; and Terry Badlands, twenty-nine thousand twenty acres in the Miles City District.

There is a total of seventy-nine thousand seven hundred seventy acres within the five areas. The fifty-seven hundred ten acres in the Seven Blackfoot recommendation are tack-ons to the C.M. Russell National Wildlife Refuge Wilderness Study Areas. If the CMR areas are not designated wilderness, the BLM recommendation would be nonwilderness for the Seven Blackfoot Wilderness Study Area.

The preferred alternatives propose no wilderness for the Dog Creek South, five thousand one hundred fifty acres; Stafford, four thousand eight hundred acres; Ervin Ridge, ten thousand two hundred acres; Woodhawk, eight thousand one hundred acres; portions of Cow Creek, twelve thousand four hundred sixty acres; and Antelope Creek, two thousand seven hundred and fifty acres in the Lewistown District; and Musselshell Breaks, eight thousand six hundred fifty acres; Bridge Coulee, five thousand nine hundred acres; Billy Creek, three thousand four hundred fifty acres; portions of Seven Blackfoot, fourteen thousand five hundred forty acres; and Terry Badlands, fourteen thousand four hundred thirty acres in the Miles City District.

The no wilderness alternative was recommended for a total of ninety thousand four hundred thirty acres in the Missouri Breaks Amendment.

This hearing is being held by the Bureau of Land Management in compliance with Section 3(d)(1)(B) of the Wilderness Act of September 3, 1964 for the purpose of accepting testimony from anyone who could be affected by the recommendations.

I am Bud Lee, and I am on the State Director's Staff of the Bureau of Land Management in Billings. I will be conducting the hearing. The court reporter is here to record the proceedings. Testimony will be accepted relevant to recommendations set forth in the Wilderness Planning Amendments and Environmental Impact Statements previously identified.

Testimony relating to other issues will not be considered. To ensure that everyone has an opportunity to have his testimony heard I ask that as nearly as possible your remarks be limited to the recommendations and environmental consequences identified in the draft documents. The statements received will be analyzed by the Butte and Lewistown District offices. The written record of that analysis, as well as transcripts of the hearing, will be prepared and made available for inspection in the district offices. I understand also that the analysis will be available in the Dillon Resource Area office. If you wish to purchase copies of a transcript of this hearing, please leave your name and address with the court reporter. A copy of the hearing record and analysis will be made available to each county involved in the study areas upon request by those county commissioners.

The analysis of the testimony received will be used to determine what changes, if any, will be required in the recommendations set forth in the documents. The analysis of the testimony and a copy of the transcript will be incorporated in the final Environmental Impact Statement and Wilderness Study Reports, which will be transmitted to the Secretary of the Interior, the President and the Congress. Copies of the final documents will also be provided to all known interested parties following concurrence and signature by the Secretary of the Interior.

I will call the names of those wishing to make statements in the order received. Please come forward and speak into the microphone. If you have a written text, I would like to have you leave that with us, if possible.

So far, we have one person who would like to make a statement. Mons Teigen, would you come to the podium, please.

126 MR. TEIGEN: Thank you, Mr. Chairman. I am Mons Teigen. I'm executive vice president of the Montana Stockgrower's Association and secretary of the Montana Public Lands Council. I'm also speaking here today on behalf of the Montana Association of State Grazing Districts of which Mel Brook is the secretary, and the Montana Woolgrower's Association of which Bob Gilbert is the secretary.

It appears right at this week there are these sorts of things going on back to back all over the state and we just can't be every place at the time we want.

A By way of introduction I would like to, or at the outset I would like to comment a little bit on the strange sort of semantics that I observe in reading these documents, and

that is the term, what is it, traveled way, rather than roads. We had several sessions with Mr. Penfold before this, relative to just what the determination of road was going to be. At one time we were left with the impression that a road was something on which some effort had been made to maintain it either A through a shovel, a grader or something like that. Now, by the simple task of changing the words from road to something else, all of a sudden it becomes a roadless area. I submit that most of these areas are not roadless areas, that they are roaded areas, and you have indicated that in your statements. However, you have called them something else.

Now, I haven't gone into detail on each and every one of these areas. I have looked a bit at two or three in the Dillon area and I'm a little familiar with those in the Missouri Breaks. First one I would like to discuss is the Blacktail area down in Beaverhead County 076002. It says here that this unit contains less than eight miles of vehicle ways. About three and a half miles of which are within one quarter mile of the boundary. Well, you call that vehicle way, you call it road, you call it interstate, whatever. I guess by calling it "way" you can avoid the roadless connotation or get the roadless connotation to apply.

In this particular area we have a sheepman Mr. Conover who runs sheep in there. I don't know if you have seen the Dillon paper last week had a very interesting story about

Conover's operation, and how he uses that particular area to graze his sheep. It is highly dependent on the use of motorized vehicles in order to move himself and his camp around there, and as I understand it, there are some indications made that he may continue to do so. I would submit that Mr. Conover had better not be misled into agreeing to something that the actual terms of the wilderness law itself prevents. You don't have to be a Philadelphia lawyer to understand that down the line somebody else could move in to the BLM office and say no, sir, Mr. Conover you can't run wheeled vehicles in there anymore even though there was some promise because the law, itself, prohibits that.

The other problem in the Blacktail allotment you have a section of state land right out there in the middle of this thing, and there is roads into that, the way I interpret the map, and yet this is included in the wilderness area with the bland assumption that we are going to trade ourselves out of this. Well, now, I have been in the land business for a few years and I know we can talk trades, but there is a lot of time elapses between the idea of when a trade first comes up in someone's mind and when there is an actual trade of deeds. I further submit that once this is included in the wilderness area, I question how much value there is in the area to be traded.

Anyway, that's one issue.

Comment was made about Farlin Creek being tacked on to, along the East Pioneer proposed wilderness, and I don't know how many of you are aware of the fact that the Interior Board of Land Appeals just the other day in a case in Nevada ruled that these tack-ons must be able to stand on their own two feet and be able to demonstrate that they are indeed wilderness areas of their own without having to rely on the wilderness characteristics of another area. I don't know how many of you have seen this. We just received it the other day.

I'm not sure that the tack-on idea is viable anymore since that decision of the Board of Land Appeals.

Getting over to the Missouri Breaks, an area which I'm
a little more familiar with having been raised down in that
country. We would like to point out that as far as our
organizations are concerned, Montana has made its wilderness
contribution to the world. We have over three million acres
B now and if more wilderness is needed, why don't you put them in
the areas where the people are. Put them in New Jersey or
Tallahassee or Atlanta, Georgia or someplace like that. We
have made this contribution and we have gotten to the point now
where wilderness is an albatross around the development of this
state. A wilderness area we have talked about management, we
have talked about multiple use. There is no multiple use and
C there is no management in wilderness. We would like to see
these areas developed. A grazer that buys a wilderness idea

D because he can continue to graze cattle there or sheep there must recognize that he will never be able to graze any more cattle or any more sheep than he does now because he is going to be precluded from making any developments, any improvements that may come to pass and become available to him in the future. So, like Geraldine says, "What you see is what you get," and that's just exactly. You never ever get any more than that.

There are several problems here. Wilderness acts permits a grazing of livestock established prior to wilderness designation. As we in the livestock business have found, reasonable regulations are often subjected to the political arena until they become unreasonable. Furthermore, although it's allowed, no permanent roads within the wilderness areas, no temporary roads, no use of motor vehicles or motorized equipment, no structures, no installation, no, no, no. The BLM admits that these restrictions increase the cost of operating on public lands. There is quite a discussion on what it would cost to use horses instead of vehicles, I notice, in the Beaverhead document.

Financial lending institutions are becoming increasingly wary of ranches that are dependent on permits in areas where there are wilderness areas.

In the specific Missouri Breaks area Cow Creek has a potential for increased range productivity through new range developments. This is an area where you can get in and make

range developments. These would benefit livestock and wildlife both. **E** It also shows a high potential for natural gas but none of these resources will be realized if this area becomes a wilderness. Our country is trying to become independent in its production of energy, yet we continue to exclude energy independence by locking up land that has an energy potential. **F** We question why the BLM recommends an area that includes a state section in this particular proposal. Shouldn't the Bureau obtain the section through trade before suggesting a wilderness designation? **G** The Missouri Breaks study readily admits that Antelope Creek's opportunity for solitude is seriously limited by the proximity of U.S. Highway 191. It also says there are not singular outstanding recreational opportunities, yet, here it is. The only rationale seems to be the physiographic continuation of CMR's Antelope Creek study unit. But here if you refer to this recent decision of the Interior Board of Land Appeals which I previously referred to, you might find that it will not work. According to Interior Board of Land Appeals each unit must stand on its own merit not as a unit contiguous to other lands. **H** This problem is also apparent on the Seven Blackfoot recommendation. The study states that neither unit contains the wilderness characteristics to stand on their own.

We oppose the designations for Burnt Lodge and Terry Badlands because we do not feel that outstanding wilderness values ever outweigh the potential resource conflicts. The production of food and fiber should always have priority over recreation. Especially when one consideration that world population will double in the next fifty years. The job of feeding the world is vast and becoming a serious challenge for everyone, including federal land managers. We respectfully submit that the Bureau of Land Management not recommend Cow Creek, Burnt Lodge, Antelope Creek Seven Blackfoot or the Terry Badlands for wilderness designations. As I pointed out earlier, Montana has already contributed over three million acres to the National Wilderness Preservation. I submit we have done our share. Let's get back to the job of managing our resources instead of inventorying them to be locked up in a wilderness.

This concludes my presentation. I would like the privilege of expanding on these remarks in a statement which I understand should be submitted by July 26 because some of the organizations I'm speaking for may want to emphasize some of these points in greater detail. Thank you.

HEARINGS OFFICER: Thank you, Mons. Are there any other speakers? I think what we will do at the present time is recess for a half hour to see whether or not we have any more people who would wish to make statements.

(Whereupon, the hearing was in recess at 1:55 p.m. and subsequently reconvened at 2:10 p.m., and the following proceedings were had and entered of record:)

HEARINGS OFFICER: We have another speaker, so I'm going to reconvene. This speaker needs to get on his way, so rather than wait for the full half hour, we will start now. The next speaker will be Bilo Comola representing himself.

127 MR. COMOLA: I wish I had something a little bit more specific to say and a little bit more time. I'm rushing in and rushing out. I guess I would like to talk primarily about the country Missouri River Breaks. The BLM manages lands along the Missouri River, the "Wild and Scenic" sections of the Missouri. I can't attest to personally having been on every acre of that land or even a large percent of it but I have spent a lot of time on some small portions of it and a lot of time on the river itself.

I think the primary beauty, I know the primary beauty for me anyway of the Missouri River, that section of the Missouri River, is not just the corridor. It's tied in directly with the quality of the landscape around it. A lot of that landscape is presently wild. A lot of that landscape is what BLM is considering, has considered in the past and rejected for wilderness classfication, although much of that is imminently qualified in comparison with other lands, in comparison with land adjacent to it. In comparison with itself it's imminently qualified for wilderness classfication.

The conflicts, I guess as I see, the conflicts aren't really that great in terms of land management. The conflicts are primarily the vocal opposition to those users that receive some sort of an economic benefit from using the land. I don't see the conflicts being that great. I have been very disappointed with the passage of the Missouri Wild Scenic River Act that allowed construction of the bridge at Judith and ultimate gas pipeline. Although there were some compromises at which I think at the time we were all willing to accept to see classification of the river. I don't really, am not really happy with the deletion of some of the land, the large acreage of the land that BLM has made along the Missouri River corridor. I really wish you guys would just take another look at some of the deletions, a close hard look. Look at them in a much broader sense than just the folks in Winifred, just the folks in that part of the country that in some cases use the land. I really don't see the conflicts being that great with wilderness classfication. I see a lot of the opposition up here as being emotional without a lot of basis and facts. I understand some response to that kind of an opposition, but really there is a lot more, there is a lot broader realm of the public as BLM is certainly aware that they are responsible to.

I guess that's what I have to say today. Nothing specific in terms of acreage but just in a general sense. Thanks for opening it back up for me so I could squeeze in and out.

HEARINGS OFFICER: Thank you. Do we have any other

speakers at this time? I think we will recess, again, until 2:30 unless for some other reason we decide to open it earlier.

(Whereupon, the hearing was in recess at 2:10 p.m. and subsequently reconvened at 2:30 p.m., and no additional speakers arriving, the hearing was adjourned and reconvened at 3:00 p.m. and no further speakers having arrived, the hearing adjourned and subsequently reconvened at 7:20 p.m. and the following proceedings were had and entered of record:)

HEARINGS OFFICER: This hearing was opened at one p.m. this afternoon and we adjourned at three p.m. due to lack of participants. In reconvening this second session of the hearing, I will repeat the opening statement.

This is a public hearing for the Wilderness Planning Amendments and Environmental Impact Statements for the Dillon and Missouri Breaks Areas. The Bureau of Land Management recently completed Draft Wilderness Planning Amendments and Environmental Impact Statements for twenty Wilderness Study Areas in the Butte, Lewistown and Miles City Districts of Montana. The twenty Wilderness Study Areas include a total of two hundred sixty-four thousand six hundred nine acres of public land. The draft documents were mailed to all known interested parties on May 10, 1982.

In the Dillon area the BLM proposed wilderness designation for twenty-seven thousand two hundred eleven acres of public lands located in portions of three Wilderness Study

Areas; the Ruby Mountains, Blacktail Mountains and Farlin Creek, and nonwilderness for sixty-seven thousand one hundred ninety-eight acres of public land located in the remaining portions of the above stated Wilderness Study Areas and the other five Wilderness Study Areas. A total of fifteen thousand six hundred fifteen acres in the Ruby Mountains Wilderness Study Area and ten thousand nine hundred eighty-six acres in the Blacktail Mountains Wilderness Study Area are recommended for wilderness. The Farlin Creek Wilderness Study Area proposal recommends six hundred ten acres for wilderness designation as a tack-on for the Forest Service's proposed East Pioneer Wilderness and transfer of management authority to the Forest Service if the East Pioneer Area is designated as wilderness.

If the Forest Service unit is not ultimately designated as wilderness, Farlin Creek is not viable independent candidate for wilderness status. The five remaining Dillon vicinity Wilderness Study Areas, East Fork of the Blacktail Deer Creek, Hidden Pasture Creek, Bell and Limekiln Canyons, Henneberry Ridge and Axolotl Lakes are recommended as nonwilderness.

In the Missouri Breaks Amendment the preferred alternatives recommend wilderness designation for Burnt Lodge, thirteen thousand eight hundred fifty acres; portions of Cow Creek, twenty-one thousand five hundred ninety acres; and

Antelope Creek, nine thousand six hundred acres in the Lewistown District; and portions of Seven Blackfoot, five thousand seven hundred ten acres; and Terry Badlands, twenty-nine thousand twenty acres in the Miles City District. There is a total of seventy-nine thousand seven hundred seventy acres within the five areas. The fifty-seven hundred ten acres in the Seven Blackfoot recommendation are tack-ons to the C.M. Russell National Wildlife Refuge Wilderness Study Areas. If the CMR areas are not designated wilderness, the BLM recommendation would be nonwilderness for the Seven Blackfoot Wilderness Study Area.

Preferred alternatives propose no wilderness for the Dog Creek South, five thousand and one hundred fifty acres; Stafford, four thousand eight hundred acres; Ervin Ridge, ten thousand two hundred acres. Woodhawk, eight thousand one hundred acres; portions of Cow Creek, twelve thousand four hundred sixty acres; and Antelope Creek, two thousand seven hundred fifty acres in the Lewistown District; and Musselshell Breaks, eight thousand six hundred fifty acres; Bridge Coulee, fifty-nine hundred acres; Billy Creek, three thousand four hundred fifty acres; portions of Seven Blackfoot, fourteen thousand five hundred forty acres; and Terry Badlands, fourteen thousand four hundred thirty acres in the Miles City District.

The no wilderness alternative was recommended for a total of ninety thousand four hundred thirty acres in the

Missouri Breaks Amendment. This hearing is being held by the Bureau of Land Management in compliance with Section 3(d)(1)(b) of the Wilderness Act of 1964 for the purpose of accepting testimony from anyone who could be affected by the recommendations.

I am Bud Lee, and I'm on the State Director's Staff in the Bureau of Land Management office in Billings. I will be conducting the hearing. The court reporter is here to record the proceedings. Testimony will be accepted relevant to the recommendations set forth in the Wilderness Planning Amendments and Environmental Statements previously identified. Testimony relating to other issues will not be considered. To ensure that everyone has an opportunity to have his testimony heard, I ask that as nearly as possible your remarks be limited to the recommendations and environmental consequences identified in the draft documents. I would like to remind you at this time if you have not already done so to register at the door and indicate if you wish an oral or written statement. If there are any other cards that I don't have, well, they will be brought forward.

The statements received will be analyzed by the Butte and Lewistown District offices. The written record of that analysis, as well as transcripts of the hearing, will be prepared and made available for inspection in the district offices. If you wish to purchase copies of the transcript of

this hearing, please leave your name and address with the court reporter. A copy of the hearing record and analysis will be made available to each county involved in the study areas upon request by those county commissioners. The analysis of the testimony received will be used to determine what changes, if any, will be required and the recommendations set forth in the documents. Analysis of the testimony and a copy of the transcript will be incorporated in the final Environmental Impact Statement and Wilderness Study Reports which will be transmitted to the Secretary of the Interior, the President and Congress.

Copies of the final documents will also be provided to all known interested parties following concurrence and signature by the Secretary of the Interior.

Now, this is a formal hearing, and as such, there will be no debate, questions or interruptions during the presentation of testimony. There are several BLM employees here from the Dillon, Butte and Lewistown offices that will be glad to discuss issues with you informally following the closure of this hearing.

I would like to introduce four of the BLM people who have been involved with this project. Dave Little, in the back of the room, is the assistant district manager at Lewistown. Dick Cosgriffe is the area manager in Dillon. Bruce Botsford. There was Bruce. He is the project manager for the Dillon

District. And Buck Damone project manager for the Missouri Breaks. Buck is back at the table.

I will call the names of those wishing to make a statement in the order I have received them and I would like you to come forward and use this podium to make your statements. If you have written copies, we would like to have those left with us following your presentation.

I would now like to call upon Mick Knox is the first presenter.

128 MR. KNOX: My name is Dick Knox.

Mr. Knox's testimony was the same as the one found in the Winifred hearing.

HEARINGS OFFICER: The next speaker will be Robert Vandervere. He is representing himself.

129 MR. VANDERVERE: Mr. Chairman, members of the committee here. I had a couple questions I would like to have asked in here but this gentleman over here that spoke prior to my coming up here covered about everything, and I agree with him on what he had said. There is one thing he didn't touch on, too, which I'm very much interested in. If any of these wilderness areas go in effect it bothers me for the elderly, the crippled people, that they are going to be denied access to
A these areas. As we all know, state law and federal says you should have ramps going in the buildings and as such make access to the crippled people. I believe if anything is made in the wilderness, I believe that provisions should be made for the crippled people, wheelchair people and such as them. And what I have read about this, heard about this, I believe we have a sufficient amount of wilderness at the present time because it's going to deny a lot of individuals for the economy of our country, oil, gas, mining, ranchers and such, going to deny them the opportunity to build our country up. Thank you.

HEARINGS OFFICER: Thank you. Next speaker will be Bill Cunningham, Montana Wilderness Society.

130 MR. CUNNINGHAM: My name is Bill Cunningham. I'm the Regional Representative for the Montana Wilderness Society which is a national conservation organization and I live here

in Helena, and I spent a fair amount of time looking at the BLM units on the ground and working with local ranchers and grazing permittees and BLM folks so I have had some experience in dealing with the areas and the issues and some of the people involved and what I have to say is based on that experience.

Comments that I have today are preliminary in that we have reviewed pretty carefully the two draft Environmental Impact Statements that deal with the Missouri Breaks and the Dillon Resource Areas, but we are going to be conducting additional field studies beyond those already conducted during the protest and appeal stages in the BLM Wilderness Review Program. So what I have to say today and the statement that I have to submit, will be supplemented with additional information before the July 26 comment deadline.

For example, next week a number of us will be in the Missouri Breaks taking another look at a number of the units from the Judith on down to the C.M. Russell Wildlife Refuge.

I have personally visited all of the Wilderness Study Areas and all of the appeal units in the Missouri Breaks as I mentioned, with BLM personnel and with local ranchers. I have seen, felt and experienced these wild lands from the river by air and by foot and I guess I'm ashamed to say even by vehicle, on vehicle ways, not on roads.

There is truly a great potential in our view to protect the magnificent Missouri Breaks Wilderness from the Wall unit above the Judith down to the C.M. Russell National Wildlife Refuge. Further, this irreplaceable wildland resource can be protected without significant resource conflict and with no impairment of existing livestock grazing operations under the recently adopted BLM Wilderness Management Policy. And under what I hope will be enlightened administration of the Wilderness Act and the cooperation of the various publics involved in the public lands.

I must admit that I am extremely disappointed by the minimal wilderness recommendations of only two units that have been added thus far in the draft stage of the EIS. That is portions of Cow Creek and portions of Antelope Creek that total some thirty-one thousand acres. The Wilderness Society joins with the Missouri Breaks Protective Association and other conservation groups in strong support of a conservationist alternative for the Breaks and the Musselshell area, C.M. Russell units and the Terry Badlands. This alternative is a considerable compromise and a considerable reduction from the original intensive inventory that was conducted and the acreage that was originally selected for consideration in the Wilderness Review Program.

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The coalition of groups that are supporting the conservationist alternative have identified two hundred nine thousand seven hundred acres of BLM wilderness in fifteen units along the Missouri Breaks, the C.M. Russell Wildlife Refuge, A the Musselshell River and the Terry Badlands. We believe that this is a carefully balanced alternative and that it does in fact represent only a fraction of the total BLM administered wildland resource in central and eastern Montana. We believe that wildlife will benefit immensely from the needed protection of the Wilderness Act of 1964. These wild lands are still some of the last places left in the Northern Great Plains where native wildlife species, such as Bighorn sheep and elk, can be restored to their original habitat. Habitat protection against things that we can't even begin to foresee is one of the major benefits of the Wilderness Act. In addition, the Wilderness Act is flexible enough to accommodate the existing uses that are occurring in these units such as livestock grazing.

I am not going to go into great detail on the conservationist alternative. I do have the information included in a more detailed statement.

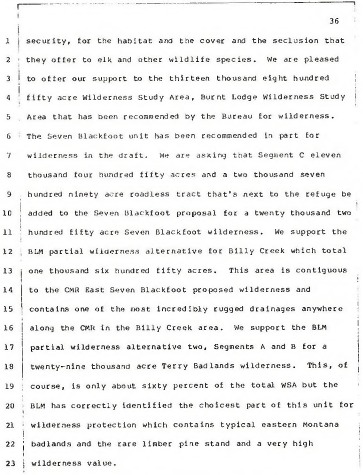
I will summarize generally the units that we have identified based on field work. The Missouri Breaks complex consists of a hundred and twenty-eight thousand six hundred acres in nine different units on both sides of the wild Missouri River. These units are the Wall, Dog Creek South, Stafford, Ervin Ridge, Bullwacker, Cow Creek, Antelope Creek, Chimney Bend and Woodhawk. Now, many of the units such as Bullwacker and the Wall are not presently and formally included in the BLM wilderness program. They were dropped at the WSA

identification stage in November of 1980 and since then we have gone through the protest and the appeal stage which is presently pending before the Interior Board on Land Appeals. We do believe that these units possess the wilderness characteristics of natural size and outstanding opportunities for primitive recreation and solitude. In both cases primitive recreation and solitude are outstanding anywhere within the Missouri Breaks corridor.

I must say, I must confess to a certain amount of disappointment that we are able to identify such a small acreage that qualifies under the Wilderness Act. It's somewhat sad that only a hundred twenty-eight thousand acres would still possess the wild character that was characteristic, of course, of all of that country a century ago.

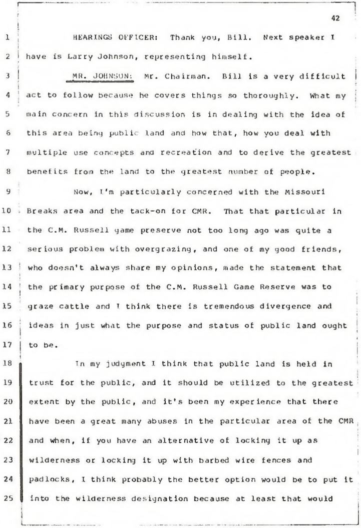
The second major component of the conservationist alternative for this area is the C.M. Russell Wildlife Refuge and Musselshell complex. These four units total fifty-two thousand one hundred acres that we are recommending for protection under the Wilderness Act. We are supporting the Musselshell Breaks and Bridge Coulee WSA's for wilderness which total about fifteen thousand acres combined. These areas have not been recommended as suitable primarily because of range improvements and oil and gas potential. But the oil and gas potential is low according to the document.

These areas are primarily important for wildlife



security, for the habitat and the cover and the seclusion that they offer to elk and other wildlife species. We are pleased to offer our support to the thirteen thousand eight hundred fifty acre Wilderness Study Area, Burnt Lodge Wilderness Study Area that has been recommended by the Bureau for wilderness. The Seven Blackfoot unit has been recommended in part for wilderness in the draft. We are asking that Segment C eleven thousand four hundred fifty acres and a two thousand seven hundred ninety acre roadless tract that's next to the refuge be added to the Seven Blackfoot proposal for a twenty thousand two hundred fifty acre Seven Blackfoot wilderness. We support the BLM partial wilderness alternative for Billy Creek which total one thousand six hundred fifty acres. This area is contiguous to the CMR East Seven Blackfoot proposed wilderness and contains one of the most incredibly rugged drainages anywhere along the CMR in the Billy Creek area. We support the BLM partial wilderness alternative two, Segments A and B for a twenty-nine thousand acre Terry Badlands wilderness. This, of course, is only about sixty percent of the total WSA but the BLM has correctly identified the choicest part of this unit for wilderness protection which contains typical eastern Montana badlands and the rare limber pine stand and a very high wilderness value.

The rest of Mr. Cunningham's testimony concerned the Dillon Wilderness Areas.



HEARINGS OFFICER: Thank you, Bill. Next speaker I have is Larry Johnson, representing himself.

131 MR. JOHNSON: Mr. Chairman. Bill is a very difficult act to follow because he covers things so thoroughly. What my main concern in this discussion is in dealing with the idea of this area being public land and how that, how you deal with multiple use concepts and recreation and to derive the greatest benefits from the land to the greatest number of people.

Now, I'm particularly concerned with the Missouri Breaks area and the tack-on for CMR. That that particular in the C.M. Russell game preserve not too long ago was quite a serious problem with overgrazing, and one of my good friends, who doesn't always share my opinions, made the statement that the primary purpose of the C.M. Russell Game Reserve was to graze cattle and I think there is tremendous divergence and ideas in just what the purpose and status of public land ought to be.

In my judgment I think that public land is held in
trust for the public, and it should be utilized to the greatest
extent by the public, and it's been my experience that there
have been a great many abuses in the particular area of the CMR
A and when, if you have an alternative of locking it up as
wilderness or locking it up with barbed wire fences and
padlocks, I think probably the better option would be to put it
into the wilderness designation because at least that would

provide a future potential for public access which would be outside of the area of livestock grazing interests.

A This whole grazing thing is a very difficult situation in that particular area because it is a very marginal quality area and, you know, in blades of grass three inches apart, it's hard to raise very many cows on it anyway. But just in a broad view I think that we should consider in thinking about this that as far as it being public land to tie it up with private profit ventures, I think is something that is a questionable motive for the use of the land. Thank you.

HEARINGS OFFICER: Thank you, Larry. I'm going to have trouble with the pronunciation on this next one. It appears to be Ed Madej.

132 MR. MADEJ: My name is Ed Madej, and I'm conservation chairman for the Montana Chapters of the Sierra Club which has more than a thousand members throughout the State of Montana. The Montana Sierra Club supports the conservationalist alternative two hundred nine thousand acres of proposed BLM wilderness and thirteen areas along the Missouri Breaks, the C.M. Russell Wildlife Refuge, the Mussellshell River and the Terry Badlands.

A Tourism is the number three industry in Montana as far as employment and amount of money brought into the state is concerned. Since the Missouri National "Wild and Scenic" River was designated several years ago, the tourist use of the area has steadily increased. Designation of the surrounding BLM lands as wilderness will enhance the protection of both the National "Wild and Scenic" River Corridor and the C.M. Russell Wildlife Refuge. Wilderness designation of these lands will A put badly needed tourist dollars in the pockets of central Montana businessmen who today only see the rear license plates of out of state cars as they leave in a flash of dust to see Glacier National Park and the rest of Montana. Few tourists will be willing to pay to see these areas if they are developed as oil and gas fields or as bentonite strip mines. I would also like to congratulate the Bureau of Land Management for their excellent wilderness recommendations for the Terry Badlands near Miles City. The Terry Badlands rival South Dakota's Badlands National Park for spectacular land forms and can be expected to establish a healthy tourist trade in Eastern Montana long after the oil and gas reserves in the Lewistown basins are gone. Thank you.

HEARINGS OFFICER: Thank you, Ed. Cleo Phillips.

133 MS. PHILLIPS: Thank you. My name is Cleo Phillips and I live just north of the area considered for wilderness, Cow Creek and Antelope Creek. Webster's Dictionary defines wilderness as an uncultivated or uninhabited region. The name itself defies multi-purpose management. For thousands of years man has been learning to live with nature. Our government has spent millions of dollars studying every specie of wildlife,

birds, fish and et cetera to come to the conclusion that man is the intruder on nature. This, then, leads to the thought that man must be stopped. I'm sure this is the thinking of so many people spending their time, energy and money on wilderness. What a ridiculous narrowminded attitude.

America, the name itself implies freedom. We are the only country in the world that raises enough food for our people. Every day we are trying to be free of foreign dependency on oil Still there are people that would set the land aside, let the weeds take the place of grass and farm land and deer and elk the place of cattle and sheep. Four generations of my family have lived on this land. My grandfather came to the country when he was twelve years old with Pike Landusky. My husband's family was there even longer as his great grandfather was B. D. Phillips, the namesake of Phillips County. In all this time man and the country have gotten along very well. The many roads are not only valuable for recreation in the area, but they are necessary in the business of ranching and checking stock, reservoirs and cattle and distributing bulls, salt, etc.

The ranchers and the people using the land for recreation have always gotten along well with each other respecting each other's use. Where the "Wild and Scenic" River is now used to be occupied by many farmers and ranchers. The river bottoms at that time were ninety-five percent occupied.

The land there is some of the very richest in the State of Montana. Where once grew crops of hay, wheat and alfalfa seed in abundance now is weed willow and deadfall. It isn't even decent grazing for the wildlife. They also enjoy fresh vegetation.

There has been a government geologist by the name of Carter Hern working out in our area for the past ten years. He has found numerous diamond formations and many oil and gas deposits and he states that geothermal potential for this country is excellent. The ranchers and farmers have evidently been taking very good care of the country or it wouldn't even be considered for wilderness.

I suggest we continue to let the farmers and ranchers in conjunction with the BLM take care of this land under a multi-use permit and get on with the business of feeding our nation. Thank you.

HEARINGS OFFICER: Thank you, Cleo. Next we have Robert Sivertsen, legislator and rancher.

REP. SIVERTSEN: Chairman, Bud, and ladies and gentlemen. I had planned to get into my levis tonight but we didn't get through up at the Special Session early enough so I come before you in this attire. But really my background is that I am a rancher and I have lived on the land all my life and so I think I can give you perspective from this point of view.

When we talk about wilderness area, I think it's really important that we really put forth this perspective, because I think that that perspective versus lease perspective that we see coming out of east of the Mississippi is a real different one and I think this is where we have the problem and I think that this is where we have the disagreement. As I said, I grew up here. I make a living off the land and I pay taxes. And I guess I would like to, Mr. Chairman, speak more specifically to the Missouri River drainage and that area that the wilderness is designated for because that is the area that I grew up in.

When I was sixteen years old, I hired out as a cat skinner. It was something new, and I built reservoirs on much of that land and worked for a contractor who built these reservoirs so that we could have the water supply and cattle, and even the benefit of the wildlife, they didn't have to travel so far to that water and, of course, certain times of the year, you know, in that area, if you don't have adequate rainfall and without adequate storage ponds there wasn't that much water to be found. And so this caused naturally the overgrazing of areas where there was plenty full supplies of water. So this was a very beneficial thing and I learned a lot from that. I became very close to that land. I grew to understand that area, and it's interesting in the State of Montana that each area has its own characteristics, has its own

weather patterns, its own rainfall. Just the difference in rainfall changes each area.

A

If you don't understand this, how in the world can you make these decisions, and this is what bothers me about when the inventory was taken on these lands that we had individuals that came out from back east for a summer job to take these inventories, and it depended on the time of the day, the time of the year that this was done as to the perception that you got on this area, and believe me, that makes a big difference, and I think that if there was any, any place that we could fault, that inventory study is right there.

You know, we can talk about the grass being three inches apart, the blades of grass, but we have to understand that in the Missouri River Breaks there is so much more to that grass. Every blade of grass there is probably ten times more powerful than it is up in the Bears Paw Mountains where there is more rainfall. You have to understand that in this country today that with the vitamins that we have been able to devise that you, yourself, can take a pill in the morning and you can go like hell all day, and that's the same way with that grass. There is a lot to it. Or you can eat a bucket full of lettuce and you can be hungry by noon. That's the difference that we have, and we have to understand that, and it's too bad that we couldn't have had a little bit more input before these inventories were done. You know, we didn't have much input

B

B until we found out that the inventories were going to be done and who it was going to be done by.

I would like to just touch for a moment upon the economics of the whole thing. I think that that's really what we are interested in also. In this country today where we see that this land is having a few problems, economically, the people still are eating at the least cost of any place in the world. So you go ahead, let's keep locking up this land and you say that sure, it's not going to in any way affect the

C grazing capacity on these lands, but I submit to you the same people that created the laws that set up the wilderness areas can amend those laws and down the road there will not be any grazing of livestock on those lands. And as that happens and the more people that we see put off this land, the more expensive food is going to become and this is going to affect all American people. I think that's got to be a consideration.

You talk about the use of these lands for the public. I think that if we can create an understanding and a cooperation between the private landowners and the public, we are going to have a lot greater and more beneficial use of lands in America than we will have if we create a confrontation whereby the private landowner gets fed up to the point where he says that's fine and dandy, you have that land and you use it and you use it alone. You go ahead and run your wildlife on that land and you see where we are going to be, because most people do not understand that probably sixty percent, and I don't know that that's the accurate figure because I think I could probably place it a little higher, but sixty percent of the wildlife probably gets the majority of its grazing off from private owned lands. You go out, take a look at the public lands and you take a look at that blade of grass and you say hooray, by gosh, that's for wildlife and that's what we want it for. Because what most people don't understand is that most of our wildlife, such as deer and antelope and other species, sage hens, they live off from brush mostly. The sage hen lives off from sage mostly. So you see, and the sage hen in the certain times of the year I see sitting out in my grain field. They are not out on public lands. The geese come in the spring and the fall. Do you see them on public lands? No way. They are out there grazing on our private lands, and you know I have no problem with that. I dearly love, because I'm a man from the land, I like to see the deers and the ducks and the geese and the antelope. I like that. You know, I haven't even fired a shot out of a rifle in the last thirteen years. When I get up in the morning, I can see deer and I like that. That's what it's all about. So I think we have to put things in perspective. Let's not make the landowner the villain that we are trying to rape the West and things of this nature. Because we are not. If we did, then our chances of going out of business are so much greater. I think we really have to dwell upon the economics of the whole thing and I think the biggest problem we have got today is that we have not made the consumer in America realize just how much we have contributed to their welfare. We, too, are protectors of that land. Be it public or be it private.

Let's take, for instance, I have talked about the wildlife. Let's look at the hunting. Sure, we have a lot of hunting in the fall on the CMR Game Refuge, but I will guarantee you that there is a lot of hunting on private lands as well, and myself being a landowner, I do not close my land to hunting. All I ask of these people is that they come and ask permission to hunt on that land, and I think that the harder we work to create an understanding, the more of a cooperation we are going to have and the more beneficial that cooperation is going to be to everybody in this country.

Really, my fear is that the longer we pursue this without having the input from the people who have to live on the land and close to that land in each area, the more problems are going to be created and the greater confrontations we are going to have. The realization by the public is going to become that much clearer down the road. That once we have gone through a great confrontation and if we ever get to the point where we are really divided on the question as to who should be using that public land, if you do not have the cooperation and the understanding from the private sector from those who own

the private land, the public lands are not going to do the public that much good. So these are just some of the things I wanted to bring forth to you. I would hope that instead of locking this land up that everybody interested would work towards greater cooperation. That is the key.

HEARINGS OFFICER: Thank you, Robert. Next speaker will be Marjorie Boyce.

135 MRS. BOYCE: My husband Merle Boyce and myself, Marjorie Boyce, feel that we have enough wilderness areas in the United States. And that a wilderness in the Missouri River Breaks would only benefit a few people. Leaving the country as it is there is some good coming out of it. The ranchers are taking care of the land. They are paying grazing fees and cattle taxes. If this was all taken out, it would put more burden on the rest of the taxpayers. I think our government should be considering utilizing these lands instead of taking them out. We should think about our country's economy. Through the years that I have lived in the Missouri River Breaks the changes that have been made have had very little impact on the environment. I think these improvements that have been made have surely not affected the scenic beauty of it

A all. With all the wilderness rules and regulations eventually there won't be cattle on these lands and possibly if these lands are to go back as it was before the white man it could result in a fire like they had in the Little Rockies years ago.

B

You can't fight a fire with modern equipment in a wilderness area. You have no control over predators, obnoxious weeds. This would be a bad situation for adjoining landowners. In closing, I am against any more wilderness in Montana.

HEARINGS OFFICER: Thank you, Marjorie. Lorraine Schwenke. I hope I pronounced that right.

136 MRS. SCHWENKE: My husband Charles Schwenke and myself, Lorraine Schwenke, ranch in the Missouri Breaks area. We oppose the Cow Creek and Antelope Creek units being designated as wilderness. These units are presently very successful multiple use areas. We realize that wilderness is a controversial issue. There is evidence that the majority of the American people do not understand what a wilderness is or what the wilderness management policies are. The Wilderness Act states that wilderness areas be managed to provide for the preservation of their wilderness character, and that they not be affected by man or man's work.

In these two units there are outstanding evidence of man and man's work. There are eleven man-made reservoirs dating back to the early 1900's and as recent as 1981. All types of modern equipment were used to construct and maintain them. There is approximately thirteen miles of fence and over eleven roads, trails and roadways. We have produced documented testimony of these roads having been built and maintained by man. These units are used by ranchers, hunters, mineral

development and recreationalists. These units have grazing programs on them. They require the use of the reservoirs, the fences and the roadways to operate profitably.

Now the 95th Congress became disturbed about the problems grazing leasers were encountering. Despite new language and history of fifteen years in providing guidance to wilderness management agencies the National Forest unduly restricted the areas for proper grazing and were acting to discourage grazing in wilderness. Now, we have been told that grazing will not be curtailed in these areas but we can only judge from past experience that we have seen by the Forest Service and on the CMR.

Designating these areas as wilderness could reduce the borrowing power of the ranchers involved putting undue strain on already marginal budgets. These units are high in mineral deposits. Geological surveys indicate diamond formations, coal and a vast wealth of natural gas. At present over eighty percent of these units contain gas and oil leases with the majority of them being pre-FLPMA lease and they have a high probability of being developed. Lease monies, tax monies and monies from the products produced is now an income to our locality. Every community that can support itself should be of utmost importance to our government. It does not seem like a good management policy for our government to keep taking more land out of production.

In the past fifteen years or more there has been an overwhelming push by environmental groups to lock up the land and turn their head on development. It seems we have been victimized by some environmental extremists. As one spokesman stated, it seems we would destroy an economically productive area in order to provide hiking for an elite group of preservationists.

Now, we agree it is important that we should protect scenery and recreational lands, but we must remember that people are ecology, too. We feel that the multiple use concept presently employed on these units has been very successful. Through supervised management policies these areas have been utilized, yet they are successfully preserved. Under wilderness policy there appears to be no strong program for land management. Moreover it appears to be a department for enforcement of regulations that restrict economical productivity of the land.

Now, a program of nonuse does not necessarily guarantee preservation. We have witnessed this on some areas that became deteriorated due to poor water distribution. No control over diseases, overpopulation of certain species and overgrowth of brush and weeds. These areas have become nonproductive eyesores. We have seen these areas that the wildlife are driven out onto the neighboring developed lands to seek food. The wilderness advocates propose that these units

are needed to ensure an ecological balance. Their prime concern seems to be the protection of the wildlife. This seems an unjustifed request as there are already one million acres designated for the Charles M. Russell National Wildlife Refuge and it joins onto these units and it contains the same eco types. The management policies of the CMR will certainly ensure the naturalness of these lands. It will protect the wildlife and provide habitat for the species that need this type of terrain. Portions of the Cow Creek and Antelope Creek are already protected by the "Wild and Scenic" Act.

The boundaries of these two units poses a management problem in that they are so erratical. It would be virtually impossible for anyone to know for sure if they were on wilderness or adjacent land. The Cow Creek unit is surrounded on nearly all sides by private lands. Access from the Missouri River is nearly nonexistent due to the private landholdings along the river. Impacts on these private lands due to wilderness could cause long-term conflicts with the landholders. These are productive units presently being used and preserved by well managed programs and we see no justification in designating them as wilderness. Thank you.

HEARINGS OFFICER: Thank you, Lorraine. The next speaker will be Robert French, Square Butte Grazing Association.

MR. FRENCH: My name is Robert L. French. I'm president of the Square Butte Grazing Association. It consists of twenty-five members headquartered in lower Phillips County with landholdings in both Phillips and Blaine County. We have grazing allocations in both Cow Creek and Antelope Creek, and we are deeply committed to multiple use in these areas. We are definitely opposed to wilderness designation in Cow Creek, Antelope Creek and any other area of the Missouri River.

A We are a grazing association using these areas from May to November. As good water is a necessity to grazing, roads are a necessity to maintenance, inspection and development. We are told grazing is to be allowed. If grazing is to be allowed, then roads will have to be allowed and maintained. Roads do not meet wilderness criteria so one contradicts the other.

Of our twenty-five members approximately one half of under the age of thirty-five. They are just getting started in the cow business and the ranching business, and the economic loss in this area would be devastating to them. B There is a state section in the middle of this area which is leased by the Square Butte Grazing Association and the State of Montana has told us they will honor all leases and commitments, and we have to have roads into this area that would go through this wilderness designated area to maintain reservoirs on that section. C The WSA speaks of solitude in the Cow Creek area. How can solitude be found when boundary to boundary is a quarter a mile or less in some areas. Most of the land

surrounding the WSA is in the hands of private land and gives to less solitude. In closing, we, the Square Butte Grazing Association, pray that Congress will look at these areas in a sensible way and leave them out of wilderness designation. Thank you.

HEARINGS OFFICER: Thank you, Robert. Milan Pavlovick.

138 MR. PAVLOVICK: Thank you. I'm Milan Pavlovick. My brother and I ranch near the Judith Landing or the P.N. Ferry. Our dad homesteaded on Ragland Bench area in 1916. Since that time our unit has increased in size. On our unit alone we have seven homestead shacks and dugouts. This alone shows presence of man.

A The WSA of Antelope Creek and Cow Creek show the same marks of man as our own ranch. When people homesteaded these areas, they had to prove up. This was to build a place to live, develop a water supply and farm so many acres. To all of these homesteaders were trails, where in many places dirt was removed with horse drawn equipment. As the years went on more water development was done, more fences were built along with more road improvements. Thereby making access to these areas for gas and oil exploration, ranchers, sportsmen and recreational uses.

B Another point that should be brought out is the access to these areas. Virtually all access routes to these areas are across private land. Should these areas be designated wilderness and more rules and regulations be implemented I foresee nothing but problems because ranchers will be very reluctant to grant access to these areas. Also the unmanageable boundaries will result in trespass cases. With the laws as they are ranchers have no choice but to protect themselves from lawsuits. In conclusion, I strongly urge the areas will remain as multiple use for the benefit of everyone, not just some select group.

HEARINGS OFFICER: We still have several other presenters. I think maybe it would be a good time now for a ten minute break. We will reconvene at about ten minutes till nine.

(Whereupon, the hearing was in recess at 8:40 p.m. and subsequently reconvened at 8:50 p.m., and the following proceedings were had and entered of record:)

HEARINGS OFFICER: We are ready to convene again, if you would take your seats, please. The next speaker will be Don Simpson.

139 MR. SIMPSON: Thank you, Bud. I'm Don Simpson. I'm with Fuel Resources Development Company, Fuelco, out of Havre. As a mineral exploration company, we are opposed to what still appears to us to be very large random withdrawals of public land from mineral exploration. In the two areas of particular interest to us, Cow Creek and Antelope Creek, we note several discrepancies in how wilderness area could or would be managed.

First in the Cow Creek area most of the mineral leases and the mining claims are on pre-FLPMA leases which if I understand correctly can be and probably will be drilled on without any special consideration of wilderness. This would be in keeping with the solicitor's opinions in lease guarantees granted when these areas were leased. The same problems would also exist in the Antelope Creek unit as a large area is also covered by pre-FLPMA leases.

Second, if the BLM should decide to handle the mineral leases differently than they have in the past, even though they are pre-FLPMA, what effect would this have on the operators who hold the leases? Will drilling and gathering lines be affected? Will operators be allowed to maintain roads to wells if they are productive? That's the end of our written testimony.

I would also like to address this economic end of this thing. Bob touched on it a little bit, Bob Sivertsen, but as far as the State of Montana right now, mineral leases are paying minerals, meaning coal, oil, gas, a third of the tax base for the State of Montana right now. And some counties, Hill and Blaine Counties, we are paying up to fifty percent, so the economic impact to the area by locking up vast areas for mineral exploration is great.

HEARINGS OFFICER: Thank you, Don. John Conover, Jr..

MR. CONOVER, JR.: I'm John Conover and we live in the Blacktail area next to a proposed wilderness area. So we are

P. 61-67 dealt with Dillon Wilderness ES.

140 **Edward Butchers testimony same as Statement #119 at Winifred hearing.**

HEARINGS OFFICER: Thank you, Ed. The next speaker will be Rudy Stulc.

141 MR. STULC: My name is Rudy Stulc. I was born and raised in the Missouri Breaks. Stumbled over most of that country at one time or another. The Missouri Breaks are about as handy as a pocket on a shirt. The ranchers graze their

cattle which provides them their income. Hunters hunt the deer and antelope. The canoers and boaters do their thing. The hikers can walk through the area doing what they please and the gas companies can explore for their products. All is well and good.

Recently it seems that a group of welldoers have decided that all is not well and good. They want these areas turned into wilderness. Oh, they will let the ranchers run cattle but for how long and how many. They will let the hunters hunt the deer and antelope as long as they are able-bodied enough to haul what they kill on their backs. The boaters can boat but no motors. The hikers can hike but it won't be long until they need a permit signed by the President. And, of course, you can search for all the minerals and gas you want as long as you don't dig in the earth.

The definition of a wilderness basically states that the potential areas of wilderness must be five thousand acres of land or more and virtually untouched by man. Virtually every ridge in the Missouri Breaks has a road meandering down A it. These roads were the lifeline to the homesteaders of that area and later roads ranchers, hunters, bikers, boaters, et cetera used. Of course, the wilderness advocates immediately saw the hazards of the truth. So while John Q. Public was sleeping they redefined a legitimate road as a vehicular way. B But that wasn't quite enough. Because in some areas these

B homestead roads qualified under their definition of a road so they came up with a cherry stem act. Under this act they can draw a line around these roads on a map and eliminate their influence on an area. If that can be done, we should have them draw a line around Cuba.

Cow Creek and Antelope Creek, the majority of the Missouri River has these vehicular ways. Cow Creek is cherry stem. And both Cow Creek and Antelope have pre-FLPMA gas leases. If these areas are the common sense definition of a wilderness area, Washington, D.C. is a prairie dog town.

A little game has sprung up in the past few years called save whatever. There is a Save a Wild Horse Club, Save a Donkey Club and recently I heard there was a Save a Wilderness Club. I immediately thought of a Save a Rancher and Farmer Club. But realized that we all would be permanent members of the Save Me Some Food Club before we knew what went wrong. I oppose any further regulation of the Missouri River and any other potential wilderness areas where agricultural progress will be hindered. I like living in a country that has the best and the cheapest food in the world. We do not need to sacrifice the land that belongs to all of us to a few well organized do-gooders whose real role is to set aside lands for their playgrounds. I have been fed enough poison that is encased in the wrapper of candy. Thank you.

HEARINGS OFFICER: Thank you, Rudy. Next is Ed Grady, Montana Farm Bureau.

142 MR. GRADY: Mr. Chairman, ladies and gentlemen. Here we are again, another hearing concerning land that mankind wants to turn into wilderness. I am Ed Grady, Director of District Nine Montana Farm Bureau Federation and speaking for that organization which is made up of farm and ranch families who believe in preserving a quality life as well as helping the land feed and clothe people as the good Lord meant it to be.

We are addressing two areas now but really they are not any different than the thousands of acres that have been dropped from inclusion into the Wilderness Act in the Missouri River Breaks. We are fully aware of the fact that the BLM was instructed to survey and come up with areas that qualified for wilderness. The first inventory had thousands of acres that met this criteria or so the people believed that made this initial study. Well, history of the last two years has proved beyond any doubt that this land did not meet wilderness criteria. One of these reasons is the fault of the Wilderness Act itself. It is open to as many interpretations as people that read it.

Another reason that we are even considering these areas is because the people within the BLM that interpret and make rules have modified the game plan to fit the pro wilderness site as we have been progressing with the studies. Let's not go out and attempt to reconstruct a wilderness area.

Let's not make abrupt changes in the land use patterns that has been in progress for many years. Let's not create obstructions that will make our great country weak because of the need of natural resources that may be in these areas. Let's not create a social and economic hardship in areas that have had an established lifestyle for many decades. Let's not tie the hands of the qualified land managers that the BLM has in managing these areas. Let's not put the good people that have put their heart and soul into this land out on their ears. Let's not deny this land to the hundreds of people that cannot use wilderness areas due to the time, physical disabilities, age, and income for a valuable source of recreation. Let's not destroy the very sound and proven principle of multiple use and go to a single use wilderness. Let's not overlook the roads, **B** springs, reservoirs, fences and other improvements that have been made in these areas and call it wilderness for the sake of something to do. Let's not throw the people off the land that are paying for the privilege of using it and put the burden of wilderness management on the taxpayer's back.

The two areas that are being addressed at this hearing, Cow Creek and Antelope Creek are very typical of the areas that have been dropped. There are many points that should be considered that are definitely not wilderness qualifications. State land in the center of Cow Creek that will have to have an **C** access road. The roads that are already in existence, the

spring developments and reservoirs that are in both areas. There is no way that the Cow Creek unit has manageable **C** boundaries. The fact that both units have existing oil and gas leases that will come under grandfather clauses. The immediate impact of wilderness designation that the BLM had prepared by an outside consultant should be considered very heavily as this is a good piece of work from an unbiased position.

Oh, we may bellyache about these hearings and it does cost the taxpayers money and places hardships on the people that are affected, but I guess it does serve some good. If nothing else, it makes us all more aware of the land and its uses. It helps all of us to possibly find a common ground where this great country can operate under a multiple use concept. We all have a spot in this life and should be able to share the individual work for the good of all.

I am certain that the people that have had the power granted to them to make determinations on how the Cow Creek and Antelope units are to be handled will see the benefit to both the land and the majority of the people to manage this land under multiple use concepts. These areas are not bonified wilderness areas so let's not try to make something of Cow Creek and Antelope Creek units that does not exist today. Thank you.

HEARINGS OFFICER: Thank you, Ed. The next speaker will be Eleanor Arguimbau.

143 MS. ARGUIMBAU: My name is Eleanor Arguimbau. By profession I'm a historian. By avocation I am, I guess, one of those people that everybody is ranting about, an elitist backpacker. I don't think I'm an elitist. I have considered myself a very ordinary person. I'm not rich. I'm always puzzled when people object to only the rich can use wilderness when their recreation in roaded areas is using a ten thousand dollar four-wheel drive vehicle and a five thousand dollar snowmobile and a, I don't know, I have no idea how much a motor boat costs. I'm using a two hundred dollar canoe. I'm using a fifty dollar pair of boots, about a fifty dollar pack. Who is the rich elitist? I can't afford to buy a snowmobile, so nothing in snowmobile-type access is protecting me. Okay, I just want to get that off my chest.

This is my formal statement. I'm in support of the conservationist alternative for two hundred nine thousand seven hundred acre wilderness area in the Missouri Breaks and the C.M. Russell Wildlife Refuge areas. I firmly believe that this is much preferable option to that proposed by the BLM draft study which recommended a minimal seventy-nine thousand seven hundred seventy acres. Most people, I think, think of wilderness in terms of mountains and forests. But I don't think this is because of the nature of wilderness. I think it's primarily because mountains and forests are the main areas that are left in a natural state, not because they are more

deserving of preservation. Prairie, grasslands and badlands are equally deserving of protection due to their unique environment and to their rarity. Grasslands have in the past been especially valued for agriculture. And most of our natural grasslands have been plowed under for wheat and alfalfa. Thus when an area exists unplowed, it has a very special unique value. The Missouri Breaks provides an ideal opportunity for preservation since almost the only agricultural practice widely has been grazing which is largely compatible with wilderness values. It is one of our few remaining chances to preserve large blocks of wild grasslands and badlands.

Two years ago I floated for the first time the wild section of the Missouri River from Fort Benton to the Fred Robinson Bridge. I found it thoroughly enchanting. There was a special type of peace where the only sounds were the lapping of the water and the haunting sounds of morning doves. This section of river holds a deep significance for most Montanans as it was the first area explored by the Lewis and Clark expedition. It is one of the few areas of the country where an area of historical significance can be seen essentially as it was at the time history took place.

I also support the inclusion into the wilderness of the Woodhawk unit and land exchanges which would allow the inclusion of such areas as Cow Creek and Chimney Bend which currently have state in-holdings. I urge the BLM to protect both the recommended and nonrecommended wilderness areas until a final determination of their status is made. Thank you.

HEARINGS OFFICER: Thank you, Ellen. Jay Mitchell of Atlantic Richfield.

144 MR. MITCHELL: Thank you, I'm Jay Mitchell of Atlantic Richfield. I'm here to talk about both the Dillon Resource Area and the Missouri Breaks. There are a couple areas within the Dillon Resource Area that have been recommended for wilderness which we believe, because of their mineral potential, should not be included in the wilderness. Those are the Blacktail Mountains and the Ruby Mountains. In addition, the Farlin Creek Wilderness Study Area should not be included in this wilderness because of an IBLA decision recently reached in Nevada which said that each of the Wilderness Study Areas must stand on its own. Farlin Creek, only six hundred acres, obviously cannot stand on its own and meet all the wilderness characteristics as prescribed by law. This ruling came out approximately two weeks ago.

With regard to the Missouri Breaks our company has quite a few lease holdings in the area. I will go through a few of the areas. In the Seven Blackfoot area we have twenty-four thousand three hundred acres of leases. And about four townships immediately adjacent to the Seven Blackfoot; and Burnt Lodge we have approximately thirteen townships of leases within and surrounding the Burnt Lodge area. Two areas not recommended for wilderness, we have five sections around Musselshell Breaks and we have twenty-two sections around Bridge Coulee.

Now, the oil and gas and mineral potential that was
given by the BLM for all of these areas was low to moderate. I
like to think of our oil and gas company as being a little bit
smarter than leasing all these low to moderate areas. I
realize that we are not too smart and we only drill
successfully about one out of eight wells, but we don't
normally go out for low to moderate potential oil and gas lands
and actually acquire leases. We submitted materials which said
A that these areas had significantly high potential for gas and
oil, not as high for oil, but particularly high for gas, and
this was completely ignored in the BLM statement. Because of
this we believe these areas ought to be thrown out and become
nonwilderness recommended and we do support the Musselshell
Breaks and the Bridge Coulee nonwilderness recommendations.
Thank you.

HEARINGS OFFICER: Thank you, Jay. Larry Blasing.

145 MR. BLASING: I'm Larry Blasing, Director of Forestry Programs for the Inland Forest Resource Council in Missoula, Montana. We are a timber industry association and represent most of the forest product companies in north Idaho and Montana.

A Obviously, the forest products industry is mostly interested in areas that have commercial forest land and some of these areas do have some. So we are extremely interested in seeing that those commercial forest lands remain available at some point in the future for timber harvests should it be feasible.

We support the removal of the areas that have been recommended for nonwilderness by the Bureau of Land Management. We have heard from the Conovers and Ed Butcher and others on the history of the use and development of a lot of these areas and it's obvious from their testimony that a lot of the areas that have been included as Wilderness Study Areas probably shouldn't have been in there, and it's only a technicality of the law that really places them there. Truly they have been developed in the real sense of the word.

They are concerned about their lifestyle and the effect that wilderness designation might have on their livelihood. This concern is real, because we have found in our industry that designation of lands as wilderness has reduced our timber base in certain areas and it has caused dislocation of industry, it's caused dislocation of families where they have had to move to go to other areas to find work. They have found that it's created hardships on communities and school systems and the tax base and the other community services that are dependent on the industry.

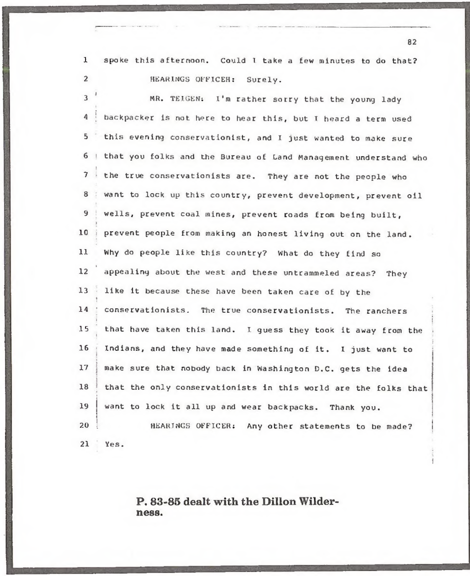
We fully support these people. Largely because they are providing not only jobs and a tax base that is necessary to

maintain the state and the local communities, but also because there is probably additional potential for future development for such things as oil and gas, minerals, perhaps timber, perhaps additional grazing and recreation that is still going to be there probably no matter what happens to the land.

One of the things that needs to be considered is the quality of the lands that are being recommended for wilderness in relationship to the other lands that have already been designated or are sure to be designated for wilderness in the state and in the adjacent areas. When you look at the Bureau of Land Management lands, you know, they may be special to some folks locally but when you look at them in terms of the overall wilderness system, they are just usual run of the mill places that look much like the hill over the next site. I think that there are going to be still areas designated as wilderness around the state that are going to fit into a wilderness system concept much more readily than those that are being posed by the Bureau of Land Management. We see no reason to support any of these areas for inclusion into the wilderness system at this time. Thank you.

HEARINGS OFFICER: Thank you. That's the end of the cards that I have indicating oral presentations. If there are any others that would like to say something at this time, or have a statement to make, we would entertain that. Mons?

MR. TEIGEN: Could I make a point of clarification? I



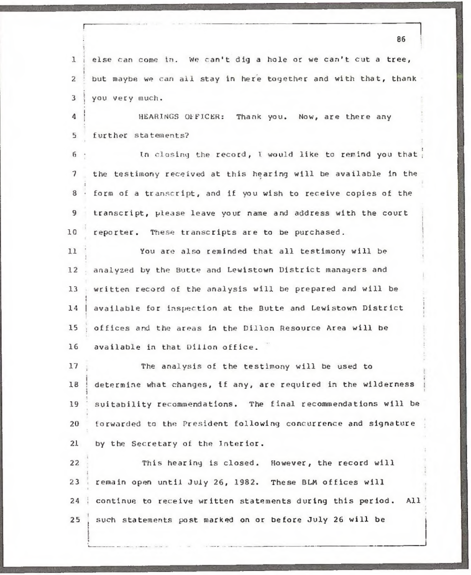
spoke this afternoon. Could I take a few minutes to do that?

HEARINGS OFFICER: Surely.

MR. TEIGEN: I'm rather sorry that the young lady backpacker is not here to hear this, but I heard a term used this evening conservationist, and I just wanted to make sure that you folks and the Bureau of Land Management understand who the true conservationists are. They are not the people who want to lock up this country, prevent development, prevent oil wells, prevent coal mines, prevent roads from being built, prevent people from making an honest living out on the land. Why do people like this country? What do they find so appealing about the west and these untrammeled areas? They like it because these have been taken care of by the conservationists. The true conservationists. The ranchers that have taken this land. I guess they took it away from the Indians, and they have made something of it. I just want to make sure that nobody back in Washington D.C. gets the idea that the only conservationists in this world are the folks that want to lock it all up and wear backpacks. Thank you.

HEARINGS OFFICER: Any other statements to be made? Yes.

P. 83-85 dealt with the Dillon Wilderness.



else can come in. We can't dig a hole or we can't cut a tree, but maybe we can all stay in here together and with that, thank you very much.

HEARINGS OFFICER: Thank you. Now, are there any further statements?

In closing the record, I would like to remind you that the testimony received at this hearing will be available in the form of a transcript, and if you wish to receive copies of the transcript, please leave your name and address with the court reporter. These transcripts are to be purchased.

You are also reminded that all testimony will be analyzed by the Butte and Lewistown District managers and written record of the analysis will be prepared and will be available for inspection at the Butte and Lewistown District offices and the areas in the Dillon Resource Area will be available in that Dillon office.

The analysis of the testimony will be used to determine what changes, if any, are required in the wilderness suitability recommendations. The final recommendations will be forwarded to the President following concurrence and signature by the Secretary of the Interior.

This hearing is closed. However, the record will remain open until July 26, 1982. These BLM offices will continue to receive written statements during this period. All such statements post marked on or before July 26 will be included in the final decisions. Also, if you have statements with you that weren't left with us, I would like for you to do that before you leave. I wish to thank you for your time and interest and I think that the statements given here tonight were very good statements and they will be very helpful in making these final determinations. Thank you.

(Hearing concluded at 9:50 p.m.)

CERTIFICATE

STATE OF MONTANA)
: ss.
County of Missoula)

I, Julie Martin Lake, CM, RPR, CSR, Official-Freelance Court Reporter and Notary Public for the State of Montana, residing in Missoula, Montana, do hereby certify:

That I was duly authorized to and did report the testimony and evidence in the above-entitled cause;

I further certify that the foregoing pages of this transcript represent a true and accurate transcription of my stenotype notes.

IN WITNESS WHEREOF, I have hereunto set my hand on this the 7th day of July, 1982.

Julie M Lake
Julie Martin Lake, CM, RPR, CSR
Official-Freelance Court Reporter
Notary Public, State of Montana
Residing in Missoula, Montana
My Commission expires: 11-10-82.

RESPONSES TO COMMENT LETTERS

1A. Thank you for your letter.

2A. The areas recommended suitable include those with the most outstanding wilderness values and consideration of other resource values. As for any specific rationale, we refer you to the WSR and ROD, to be released after USGS/BM surveys.

2B. Congressional intent to maintain grazing in wilderness areas is clear. Congressional guidance has also been provided for the maintenance and replacement of existing range projects and the construction of new range projects. See the "Wilderness Management Policy (9/81)." Such activities projected in the EIS will have to meet those guidelines, if the WSAs are designated as wilderness.

3A. Much of the Crooked Creek drainage lies within private lands. It is presently a complicated process to acquire private lands and there is no way to ensure that private landowners would sell or trade these holdings. The owners have not indicated any desire to exchange or sell these holdings. Therefore, no alternative considers the wilderness values of this private land.

3B. There is potential for some development on those areas not recommended suitable for wilderness. Chapter 2 treatment is specific about potential development for each WSA.

3C. The question of mining coal adjacent to those portions of Terry Badlands recommended suitable and in portions of that recommended nonsuitable, is still undetermined. No leases have been awarded at this time.

4A. The BLM has considered local attitudes, which are generally negative, throughout the inventory and study process in arriving at recommendations. In the Missouri Breaks area there has been significant support from persons and organizations outside the local area for wilderness designation. The area received substantial publicity through the Wild and Scenic River designation.

4B. Section 5(e) of the Wilderness Act pertains to acquisition of private inholdings in wilderness areas. The state has expressed the desire to trade out of inholdings inside BLM wilderness areas.

The FEIS considers the possible acquisition of state land inholdings in Terry Badlands and Cow Creek. The Proposed Alternative in Seven Blackfoot does not recommend acquisiton of private or state lands. In the case of the other two areas, any acquisition would probably be an exchange of equal value lands outside the WSA. Due to land exchanges unrelated to wilderness review, the status of some inholdings has changed.

4C. The Draft EIS has documented mineral potential in Cow Creek and Antelope Creek. Both areas appear to have geologic characteristics conducive to trapped pockets of natural gas. Exploration within these two areas, however, has not led to significant discoveries. Further exploration can occur on areas leased within the Cow Creek and Antelope Creek WSA boundaries. If a significant discovery were made, this information would be placed in the USGS/BM mineral report that must be prepared for Congressional review before the final decision on designation is made.

The long-term capability between oil and gas exploration and development and wilderness designation has not been settled by Congress. As indicated in Chapter 3, additional leasing in wilderness (and in WSAs) is precluded.

While the limited exploration work which has occurred in Cow Creek was not sufficient to have the area dropped from wilderness study, large scale exploration and development would significantly reduce wilderness values. The access routes to isolated drill sites often are used by hunters and other recreationists after the exploration work is completed and would become more obvious signs of man's influence.

The FEIS does not consider ACEC designation for Cow Creek or Antelope Creek. If Congress releases the areas from wilderness consideration, future planning could provide for consideration of these areas for some other forms of protection, such as ACECs or research natural areas.

4D. The EIS indicates the location and status of the Calypso Trail (a road) in Terry Badlands. It was felt, however, that the two segments A and B each contain the diversity of land and vegetation types necessary to preserve the ecological character of the Terry Badlands. The road receives low use and is screened from most of the area recommended suitable for wilderness.

5A. It is BLM's position that the impacts on wilderness values associated with the cherry-stemmed road into the center of the Woodhawk unit along with natural gas potential and substantial range project maintenance needs are relevant. All pre-FLPMA leases in the WSA have expired.

5B. The Draft EIS considered whether grouping several areas such as Woodhawk, Cow Creek and Antelope Creek would eliminate resource conflicts and improve the potential for long-term wilderness manageability. As those three WSAs are separated from each other by state land, private land and roads, no resource conflicts would be eliminated through grouping.

6A. The acreage you recommend total approximately 4,160 acres. The resulting boundary has virtually no correspondence to on-the-ground features. Terry Badlands Partial Wilderness Alternative 1 includes all the lands which you indicate meet the wilderness criteria for inclusion in the NWPS. In addition, Partial Wilderness Alternative 1 contains approximately 16 additional sections of roadless public lands with the same high wilderness values and limited resource conflicts. The Bureau's Wilderness Study Policy established criteria for development of partial wilderness alternatives. They are that they either reduce resource conflicts or improve the potential for long-term manageability as wilderness. The comment, while suggesting a new partial alternative, makes no reference to any factors which meet the two above criteria.

7A. The Bureau has attempted to document the mineral potential from data already available to the BLM. The Secretary will not forward a recommendation of suitable for wilderness to the President and Congress without a USGS/BM mineral report. The BLM did consult with local petroleum companies about the mineral potential in the subject area. Many companies responded with their ratings on potential. These ratings were considered along with the research of BLM geologists in arriving at geologic potential.

7B. Several criteria in determining petroleum potential are the number of producing and dry wells in the area as well as existence of leases. These factors have been considered. It is true that little or no activity has occurred in several of the WSAs. For those, the BLM geologists have relied on general structural geology and other information to rate mineral potential. As gas deposits discovered in the area to date have been a combination of structural and stratigraphic, this type of trap was the major consideration in rating oil and gas potential in the WSAs. While the mineral potential has been boiled down to terms of high, moderate and low, the criteria was very similar to that suggested. Figure 3.1 has been corrected.

7C. The bentonite in the Antelope Creek WSA is in narrow bands in rugged terrain. At present, no commercial interest has been shown in bentonite in the Antelope Creek area as it would be difficult or impossible to prove economic feasibility.

7D. The Draft EIS on page 108 was in error. The first paragraph should have read, "Based on the evaluation of mineral potential, reduced ability to explore for or develop possible natural gas reserves would be the major impact of wilderness."

7E. The statement on reduced impacts to industry because of restrictions to explore low to moderate potential areas was strictly one of degree. The current assessment is that the mineral potential is low to moderate. Further exploration and generation of hard data between the present and when USGS completes its study will be considered by Congress in its final decision of designation. If the interpretation of valid existing rights changes, the Secretary of the Interior, the President and Congress have every opportunity to modify the suitable recommendations.

7F. Estimates of tax advantages were based on the best data available.

7G. The BLM's Wilderness Management Policy discusses the continuation of other uses of lands if they become part of the NWPS. The Policy states that, "Use and values will vary between wilderness area and frequently vary among different parts of an individual wilderness. There may be wide differences in terrain and other geographic characteristics, climate, vegetation and wildlife. Historical patterns of use, local customs and the traditional attitudes of visitors also differ between and within wilderness areas. Consequently, activities that are accepted and management practices that are necessary and appropriate on one wilderness may be either unnecessary or unacceptable on others. While this may require some flexibility in the management and administration of the individual units of wilderness, all are part of one National Wilderness Preservation System and shall be consistently managed within the intent of the Wilderness Act." Specific management of a particular wilderness area will be developed in a wilderness management plan prepared after designation. Chapter 2 of the FEIS makes reasonable projections of mineral activity by alternative for each WSA that are consistent with policy, regulations, and planning decisions.

7H. The statement that loss of loan value of BLM grazing permits would be short term is based on the BLM Wilderness Management Policy, which will allow for continued grazing with some additional costs to permittees. Lenders should be able to determine over several years that BLM designated wilderness is not a reasonable reason to reduce the loan value of a permittee's operation in wilderness to zero. The issue of loan value is most important when an operation is heavily mortgaged or otherwise used for collateral.

7I. The opportunity to expand the diversity of the NWPS will be foregone regardless of the disposition of U.S. Fish and Wildlife wilderness proposals. Since the BLM and USFWS proposals are the same ecotype subgroup, the designation of the USFWS units would significantly reduce the impact of certain BLM units not being designated as wilderness.

7J. It is the private landowner's right to allow or disallow access through their lands to public lands. However, we hope that the ranching community will continue its practice of generally permitting the public access to these larger blocks of public land.

8A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

9A. Comments on closure of the UL Bend wilderness are not within the scope of the Missouri Breaks Draft Wilderness Suitability Study/EIS. The UL Bend area is managed by the U.S. Fish and Wildlife Service.

10A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

10B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

11A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

12A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

13A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

14A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

14B. Congress has made its position clear that grazing will continue in designated wilderness. Two House Committee on Interior and Insular Affairs Reports (95-620 and 950-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be followed.

15A. Thank you for your letter.

16A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

17A. The BLM has analyzed the impacts of your recommendation under an alternative, generally all wilderness, for each WSA you mention.

18A. The BLM proposals do not restrict any normal vehicle access to the Fort Peck Project Lands.

19A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

19B. If and when the WSAs are designated Wilderness, land exchanges will be considered consistent with Section 5(c) of the Wilderness Act and Bureau Policy. In the meantime, land exchanges involving inholdings may occur as a result of other resource considerations.

20A. Thank you for your letter.

21A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

21B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

22A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

22B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

23A. Thank you for your letter.

24A. See response to 107A for same individual.

24B. Fire suppression will continue as specified in Chapter 1.

24C. It is the private landowner's right to allow or disallow access through their lands to public lands. However, we hope that the ranching community will continue its practice of generally permitting the public access to these larger blocks of public land.

25A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

25B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

26A. We are recommending a portion of this ecoregion and feel that BLM areas along with those of the same type recommended by the Charles M. Russell National Wildlife Refuge provide an adequate sample of such ecological subtypes in the National Wilderness Preservation System.

26B. Most of the local range users have indicated that wilderness constraints on off-road vehicle travel and the construction of additional livestock facilities limit their freedom of action in managing their cattle on public land grazing allotments and would be damaging to livestock users.

26C. The Missouri River Corridor has been Congressionally protected through the provisions of the National Wild and Scenic Rivers Act, PL 90-542. There are no statutory obligations at present that require BLM to provide a land buffer around the Charles M. Russell National Wildlife Refuge. Interagency coordination at this time is working well to maintain important wildlife habitat.

26D. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

27A. All pre-FLPMA leases in both Cow Creek and Antelope Creek have expired. This was generally due to lack of production on the leases within or outside of the WSA. The current leasing situation (8/86) for each WSA is described in Chapter 3. If either WSA were designated wilderness, mineral activities on any post-FLPMA leases would be handled on an individual basis. This would reflect the variations among activities and the specificity of policy and regulations.

28A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

29A. There will be no final recommendation to Congress until a USGS/BM mineral report is completed for each of the WSAs recommended suitable for wilderness. All pre-FLPMA leases, except for some in Ervin Ridge WSA, have expired. Any additional data on mineral potential of the WSAs gathered between now and the completion of the USGS/BM study will be carried forward to Congress and used in their decision making process.

29B. The only loss in revenue for range that is portrayed is for permittee net revenue. Other range revenue related impacts were not calculated because they are diffuse and small. The impacts to revenues from oil and gas activity were not estimated. Estimates of county and State revenues of adjacent gas or oil fields (see Appendix), the mineral scenarios in Chapter 2, and the impacts in Chapter 4 suggest that they would be small. While the mineral scenarios are reasonable, it is not certain that they would be profitable, due to high operating costs and other factors. Possible commercial coal deposits have only been identified in Terry Badlands. Again, there are no revenue estimates. Note that the lease application boundary has changed since the draft.

30A. From this agency's perspective, the future of the Charles M. Russell National Wildlife Refuge appears to be as certain as that of any other Federal agency.

30B. Wilderness management poses one of the great challenges to imaginative land planning. Dispersal of visitors to limit overuse, measurement of visitation to establish carrying capacity, maintenance of natural ecological processes, fire control and sanitations pose only a portion of the management considerations of the wilderness administrator. We feel that Montana's designated wilderness areas are in good shape and are being properly managed.

30C. Congress has made its position clear that grazing will continue in designated wilderness. Two House Committee on Interior and Insular Affairs Reports (95-620 and 950-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be followed.

30D. In the intensive inventory phase and later during evaluation of Seven Blackfoot during the summer of 1981, no evidence of extensive timber cutting for posts and poles was found. The estimates are also consistent with permits to cut timber that have been issued by this office. The adverse effects of the farming activities and travel on Fort Peck Reservoir were evaluated. Boundaries reflected in the Proposed Alternatives are much in response to the effects of motorized farming operations immediately adjacent to the WSA. The distance of the WSA from the lake, levels of motorboat use on that part of the lake, and effective vegetative and topographical screening within the area make the adverse effect of water based activities insignificant.

30E. BLM has noted in the EIS the impact of wilderness designation on vehicle dependent visitors. Substantial research points to the typical wilderness users as being college educated or college students, holding higher paying jobs in professional, managerial and scientific fields.

31A. Evaluation of the idea of replacing cattle with bison on BLM lands adjacent to the Charles M. Russell National Wildlife Refuge is beyond the scope of this document. The comments will be considered in determining the ultimate wilderness suitability of those areas for inclusion into the National Wilderness Preservation System.

The WSAs are in the southern end of the historic (continual) distribution of the swift fox. There are no prairie dog towns, the preferred habitat of black-footed ferret, in any WSA. There are no documented sightings of either species in any WSA. We are not aware of any recommendation to reintroduce either species in any WSA.

32A. Thank you for your letter.

33A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

34A. This statement will be considered in determining the ultimate wilderness suitability of those areas for inclusion into the National Wilderness Preservation System.

34B. While the Coyote Coulee area contains excellent scenery, it is an area that would continue to have impacts on wilderness values. The southern portion along the county road in T. 24 N., R. 23 E. is extensively used for livestock grazing. As water is limited in this part of Cow Creek WSA, the cattle congregate at the reservoirs on the benches. The predominance of use for livestock creates a regular demand on the three cherry-stemmed roads in the Coyote Coulee area.

34C. The State land inholdings in T. 24 N., R. 22 E., Section 16 of Cow Creek are recommended for exchange and wilderness designation. In addition, the BLM proposal recommends exchange or acquisition of one State section and one private section adjacent to the Burnt Lodge WSA (T. 12 N., R. 49 E., Section 16 of Terry Badlands). Any exchanges or acquisitions will be made on a willing buyer-willing seller basis.

35A. The existence of a number of manmade developments dispersed over 45,000 acres of extremely rugged terrain does not significantly affect the apparent overall naturalnesss of much of the Cow Creek and Antelope Creek WSAs. The impacts on naturalness are primarily site specific. The Missouri Breaks Wilderness Suitability Study/EIS recommends a partial wilderness alternative that eliminates a number of manmade features for both Cow Creek and Antelope Creek WSAs. The impacts of the remaining developments and onsite sights and sounds were analyzed.

36B. The Draft EIS indicated the potential for natural gas is high. The mineral scenarios in Chapter 2 of the FEIS reflect this potential. The BLM has no indication of the probability of actually recovering the resource. Because natural gas is located in isolated pockets, successful drilling is difficult. Any leases which contain a producing well would be held by the lessee for production and would retain the rights to gather the resource. Every area that is recommended to the President and Congress must be accompanied by a USGS/BM mineral report. Any drilling prior to preparation of that report that results in an economically recoverable energy resource would be included in that report and made available to Congress in their determination of whether the Cow Creek and Antelope Creek WSAs should be designated as wilderness.

36C. The input from local persons has been extremely important throughout the inventory and study phases of the Wilderness Review process. Information local residents have provided on the location of developments, as well as use of roads and vehicle ways, has been an important consideration in the selection of the WSAs.

37A. The document has been reformatted so that, for each Chapter, all information for each WSA is generally together. However, the format of five chapters has been retained.

37B. Additional photos would have substantially increased the cost of this document, and not materially increased the substantive content.

37C. The Bureau feels that we have conducted an unbiased study with considerable public involvement.

37D. "Custodial management" occurs on allotments for which there is low resource production potential and are producing near their potential; no resource use conflicts or controversy exist; opportunities for positive economic return from public investments do not exist, or are constrained by technological or economic factors; present management is accomplishing the desired results. Other criteria, as appropriate, may be considered. This is the existing categorization.

37E. All of the proposed AMPs and projects have been in development for a considerable length of time, most from before these WSAs were identified. Approximately one-third of the Federal AUMs are in the WSA portion of the allotments. The remainder are on the allotments and outside of the WSA.

37F. Loan value determinations were made based on what lending institutions said their loan policy would be if an area was designated as Wilderness. We do not know all the factors that may determine their loan policy.

37G. The issues of the level of grazing fees on public land is beyond the scope of this document.

37H. Thank you

37I. Most of the acreage in these WSAs has not been explored to date, given the rugged character of the areas and supplies elsewhere. Our minerals evaluations in this document, therefore, were also based on geologic considerations. The probability of finding economically recoverable mineral reserves is undetermined.

37J. Oil and gas activity was raised in both inventory and scoping. Therefore, given the perceived concern, we have analyzed the impacts of mineral activity on wilderness and vice versa.

37K. It is BLM's position that the units have low wilderness quality. Both units are relatively small (Dog Creek South — 5,150 acres; Stafford — 4,800 acres) and are adjacent to areas of intense human activity. Solitude values in both units are significantly compromised by this activity. High natural gas potential is reflected in the mineral scenarios.

37L. The values of natural gas in the area, resource and access difficulties are reflected in BLM's assessment of this area. The leases in part of the WSA are already held for further exploration by producing wells immediately adjacent to the WSA. The potential for long-term conflicts from gas development is greater in this unit than in any other in this study. The WSA has relatively high levels of developments. The only road access on the western end of the unit is controlled by private interests.

37M. The Woodhawk WSA does contain portions with quality wilderness characteristics. Activities associated with dense range developments, particularly in the southern portion and the disruptive effects of vehicles on the ridgetop "cherry-stemmed" road adversely influence solitude values in much of the unit. In addition, the WSA does have high potential for natural gas. Maintenance and repair of the dense water development complex in the rugged southern portion of the WSA would likely not be possible without lasting reduction of natural values.

37N. The main reason for the configuration of the proposed alternative was to eliminate the Squaw Creek Road "cherrystem". While it is true that such "cherrystems" provide access, especially to the young, elderly and handicapped, they also supply a significant focus for disruption of solitude along this narrow corridor. The alternative you suggest, in the northwest portion of the WSA, is indistinguishable from the All Wilderness Alternative, for that portion of the WSA, by any criteria other than acreage.

37O. There are major offsite disruptive influences on solitude within the WSA, along with conflicts with development of the range resource. Immediately adjacent farms and intensively cultivated farmlands coupled with the pattern of drainages, which slope towards those impact sources, create a major disruption of solitude values.

37P. Billy Creek minimally enhances the wilderness values of the CMR WSA. Activities on the subdividing roads reduce wilderness values within the BLM WSA and impact solitude within the southern portion of the CMR unit. The Billy Creek area is not a logical extension of the CMR WSA, as it is a transitional ridge between the rugged breaks in the Refuge and the flat, open farmland to the south.

37Q. The portions of Seven Blackfoot WSA which BLM recommends are those which are logical extensions of drainages towards the CMR WSAs, which have high wilderness quality. Intensive farming activities on lands directly adjacent to much of the southern portion of Seven Blackfoot adversely affect solitude values in portions of the southern roadless areas. The southern parcel includes most of the range improvements and the State inholding. The subdividing roads trisecting the entire unit also are a source of infringement on solitude values, particularly on the less well screened south half. BLM's recommendation is contingent on designation of the CMR's units by Congress.

38A. Thank you for your letter.

39A. Every area that is recommended by the Secretary of the Interior as suitable to the President and Congress must be accompanied by a USGS/BM mineral report.

39B. We believe the document adequately states the mineral potential of each WSA.

40A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

41A. The Upper Missouri Wild and Scenic River (UMWSR) Management Plan of 1978 addresses in detail the adequate protection of the lands within the designated river management corridor. An active program of river management separate from the wilderness study is ensuring the long-term protection of the river corridor. The wilderness study does include some lands in the corridor and, if designated wilderness, these lands would receive additional protection not included in the river legislation. The Bureau is committed to managing the values of the Wild and Scenic River corridor.

42A. The comments on Billy Creek, Seven Blackfoot, Bridge Coulee, Musselshell Breaks, Antelope Creek, Burnt Lodge, Stafford, Ervin Ridge and Cow Creek are within the scope of this EIS, while the other areas recommended are not. The acreages and boundaries of the WSAs studied in the EIS are those from the State Director's Final Inventory Decision of November 1980, and were unchanged by appeal.

43A. Thank you for your letter.

44A. The Bureau determined that the wilderness values of the eastern portions of Segment A of Seven Blackfoot were reduced due to the proximity of activities associated with the Wilson Ranch and conflict. Occasional motorized use of the internal vehicle trail in the excluded portion would continue even under designation as wilderness. The western portion, which is recommended suitable, contains the head of the physiographic extension of Big Coulee Creek. That drainage runs through the CMR study area and empties into Fort Peck Reservoir.

44B. It is true that this segment is a physiographic extension of the Billy Creek Drainage which makes up the CMR proposal. The fact that the CMR has chosen to not recommend designation for one of the two sections north of Section A of Billy Creek WSA tends to weaken the argument that the BLM unit should be added because it is a valuable physiographic link with CMR. In addition, it is BLM's position that the road separating Segments A and B and following the Billy Creek drainage is disruptive to the solitude in that portion of the segment and diminishes much of the value of the BLM WSA to the CMR study unit.

45A. The BLM's Wilderness Management Policy allows for both predator and noxious weed control if they threaten adjacent lands or domestic livestock within or outside the wilderness area. Control would be on a case-by-case drainage directed to the particular predator or noxious weed causing the problem.

45B. The designation of lands as wilderness does not automatically infer either additional benefit or detriment to wildlife. The Wilderness Management Policy allows for wildlife management programs. One portion of this policy includes provisions for adequate harvest of wildlife to maintain a balance with available food supplies. In extremely large blocks of wilderness the lack of access would hinder adequate harvest. The EIS discusses the impacts by WSA on reduced hunting access and generally concludes that because of the relatively small size and available access along the boundaries of the WSAs, hunting as a management tool would not be significantly affected.

45C. Potential additional costs to operators is discussed. The Luft study you mention was contracted for by the BLM and reflected in the FEIS. There is a potential for reduced loan capability. This potential would be most realized for those operations heavily mortgaged or otherwise used as collateral.

45D. All of the pre-FLPMA leases that existed in Cow Creek and Antelope Creek WSAs have expired.

45E. The State section recommended for acquisition in the FEIS contains wilderness values similar to the surrounding public lands. The BLM recommends acquisition to enhance the continuity of the area. The State of Montana has indicated their interest in exchanging lands within designated wilderness in discussions preliminary to the draft recommendations.

45F. The vehicle ways in Cow Creek and Antelope Creek would be closed to regular traffic. Use would be restricted to permitted activities by grazing operators.

45G. The draft EIS clearly stated that the Antelope Creek WSA contains outstanding opportunities for solitude, especially in the western 9,600-acre Partial Wilderness Alternative 1 which is recommended for wilderness designation. This segment does stand on its own merits. Its contiguity with CMR enhances the characteristics of size and the opportunities for solitude. The 2,750-acre eastern parcel, Partial Wilderness Alternative 2 which is impacted to some degree by its proximity to U.S. 191, is not recommended as suitable for wilderness designation.

45H. The Bureau has looked carefully at the IBLA case you allude to, Tri County Cattlemen's Association, and other IBLA decisions related to the Wilderness review process. A distinction is made between those areas which the Secretary has authority to study under Sections 202 and 302 of the FLPMA and those which fall under the statutory mandate to report to the President under Section 603 of FLPMA. Authority exists to study all of the areas you mention and the BLM has chosen to do so. The mandate to report recommendations applies (at least) to the west roadless area in Antelope Creek and the southern roadless area in Seven Blackfoot.

This case does not appear to apply directly to Seven Blackfoot which originally contained 20,250 acres and was divided in the Final Inventory Decision by roads into three roadless areas, two of which were less than 5,000 acres. Both roadless areas contain wilderness resource values which would enhance the wilderness opportunities available in the contiguous CMR study areas.

In the case of Billy Creek, the Tri County Cattlemen's Association decision appears to apply. However, the IBLA ruling clearly states that BLM is within its authority to study areas such as Billy Creek for wilderness suitability under the provisions of 43 USC 1712 and 1732 (1976) and sections 202 and 302 of FLPMA.

45I. While the Draft EIS does indicate a potential for impacts to wilderness values, if lands in the southwest portion of the Burnt Lodge WSA are further subdivided or developed as homesites, the area contains many areas where a visitor could experience outstanding solitude. The size, dissected terrain and dense pockets of timber would allow continued use of the vast majority of the WSA as wilderness, even if the values in the southwest corner were reduced by offsite development. The acquisition of the State and private land identified in the draft would be a substantial benefit to the overall continuity of the Burnt Lodge WSA, but the recommendation of suitable for wilderness does not hinge on those acquisitions. The high wilderness values dictate the overall recommendation. The Terry Badlands by virtue of its extremely rugged character has retained its natural appearance and does provide outstanding opportunities to experience solitude as such portions clearly qualify. While the threat of change of the natural character is limited by terrain, there is always the potential for some development. The legislative protection provided by wilderness designation would ensure the long-term continuation of this area's unique and outstanding wild character.

46A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land

Appeals. The result was that the State Director's Decision remained unchanged.

46B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State.

47A. We believe that your submissions on the assessment forms transposed estimates for Billy Creek and Seven Blackfoot WSAs. Based on the 11.7 Bcf/section, the reserves for Seven Blackfoot are 330 Bcf and for Billy Creek are 58.5 Bcf.

The response on the assessment form used as BLM's medium for soliciting minerals data quotes a potential gas production of 58.5 Bcf. The recent letter poses the figure of 330 Bcf, quoted from the same National Petroleum Council report. Also, the response on the form indicated a moderate rating of "3" with the remark, "favorable for shallow gas production", while the recent letter rates the oil and gas potential as "extremely high."

The report you cite assumed, for example, a range of gas prices typical of 1980 (which have since declined), advances in and broad implementation of advanced technology (particularly fracturing and changes in spacing requirements. Based on the study, Seven Blackfoot WSA contains about 4 percent of withdrawn and potentially withdrawn areas in the Northern Great Plains/Williston Basin. Further, the WSA contains less than 0.5 percent of the gas reserves in the Basin.

Based on the assumption of that study, we do not believe it is appropriate to change the potential rating.

47B. We based our evaluation of the minerals in Seven Blackfoot on the comments solicited from industry as well as on the geology and past drilling history of the general area. The six industry ratings for Seven Blackfoot ranged from 1 (low potential) to 3 (moderate potential). USGS has rated the area as moderate for both oil and gas.

47C. Along with the final suitability report/EIS, Congress will receive a minerals report from USGS/BM. Any information on oil and gas potential which is generated from now until the USGS/BM report is conducted will be included in that report. Even if oil and gas potential had rated somewhat higher, Seven Blackfoot has such high wilderness values that we believe BLM would still have recommended the area as suitable for wilderness.

47D. A USGS report (open file 79-104, 1979) for the immediately adjacent Burnt Lodge area states that there is good potential for biogenic gas accumulations in upper Cretaceous deposits at less than 2,000 feet and moderate potential for oil in Paleozoic rocks. It further states that potential accumulations are difficult to delineate because of the absence of subsurface stratigraphy and of structural controls in the area. On the basis of this report, industry ratings and research of available data by BLM geologists, we estimated that Burnt Lodge has moderate gas potential. As in Seven Blackfoot above, a USGS/BM report will be transmitted with recommendations. Given the high wilderness values of Burnt Lodge, the BLM proposed wilderness designation. Congress will have the opportunity to consider this input as well as new data generated prior to their decision.

48A. While the Coyote Coulee area contains excellent scenery, it is an area with a number of conflicts. The southern portion along the county road in T. 24 N., R. 23 E. is extensively used for livestock grazing. As water is limited in this part of Cow Creek, the cattle congregate at the reservoirs on the benches. The predominance of use for livestock creates regular use on the three cherry-stemmed roads in the Coyote Coulee area.

48B. The Woodhawk Unit does contain portions with quality wilderness characteristics. Activities associated with dense range developments, particularly in the southern portion, and the disruptive effects of vehicles on the ridgetop "cherry-stemmed" road adversely influence solitude values in much of the unit. In addition, the unit does have high potential for natural gas. Maintenance and repair of the dense water development complex in the rugged southern portion of the unit would likely not be possible without lasting reduction of natural values.

49A. Thank you for your letter.

50A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

50B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section, if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

51A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged. Therefore, the WSA boundaries in the FEIS are identical to those in the DEIS.

52A. Thank you for your letter.

53A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

54A. Wilderness, as demonstrated in passage of the Multiple Use-Sustained Yield Act of 1960, the Wilderness Act of 1964, and the Federal Land Policy and Management Act of 1976 is considered by the Congress to be consistent with multiple use of the public lands. Multiple use is an attempt to optimize the net benefit to society from public lands, but it does not mean that every use has to occur on every tract of land.

54B. While wilderness planning requires consideration of other uses of the lands, wilderness does not prohibit or reduce present levels of grazing, recreational use or wildlife management. Future leasing, exploration and development of mineral reserves in wilderness are dependent on national need as determined by Congress, most of the recreational use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. However, a potential impact to some vehicle dependent persons who travel the vehicle ways would occur.

54C. The potential for increases in wildlife populations in Burnt Lodge is discussed in the FEIS.

54D. The FEIS identifies the presence of offsite impacts on solitude opportunities but concludes that areas of Burnt Lodge continue to offer outstanding opportunities for solitude.

54E. Congress has made its position clear that grazing will continue in designated wilderness areas. Two House Committee on Interior and Insular Affairs Reports (95-620 and 95-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be closely followed.

54F. Wilderness management poses one of the great challenges to imaginative land planning. Dispersal of visitors to limit overuse, measurement of visitation to establish carrying capacity, maintenance of natural ecological processes, fire control and sanitation pose only a portion of the management considerations.

54G. A consideration of wilderness study is to determine possible economic impact to those relying on public lands for a portion of their income. For this reason, nonconforming uses such as grazing with its associated range developments are allowed to coexist with wilderness. Wilderness areas are open to certain uses and provide a variety of benefits to society.

Development for the most part have site-specific impacts which are screened from any distance by rugged terrain and vegetation. While there is no exact measurement as to what use the general public will make of areas designated wilderness, Congress in passage of the Wilderness Act and the BLM in formulation of its Wilderness Management Policy, recognized a variety of benefits of wilderness to society.

"Use might be 'onsite,' taking direct advantage of the multiple resources of the area. Or the use and benefits may be derived 'offsite,' such as through enjoyment of the scenery at a distance from a nearby highway, through indirect benefits from the area's resources (i.e., water quality, wildlife, etc.), or just the knowledge that the area exists."

55A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

55B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State.

56A. Thank you for your letter.

57A. The boundaries for much of the WSA and much of the area proposed for wilderness designation follow legal subdivisions. In many cases, these legal lines closely parallel natural barriers such as ridgetops and the transition zone of the rugged breaks and the surrounding privately owned benchlands. Much of the boundary on the north and east sides of the area recommended for wilderness is formed by the Yellowstone River and roads. Many of the roads which form boundaries are on ridges or other topographic features.

57B. The road access to the scenic overlook is cherry-stemmed. This means that if the area were designated as wilderness, this road would be outside the wilderness boundaries and would continue to provide access to the overlook.

58A. The possibility of a linear river corridor BLM wilderness is beyond the scope of this document. The BLM Inventory Handbook, September 1980, outlined the procedures by which inventory units were initially identified. "Inventory units will be roadless areas or islands, bounded by either a road, nonpublic lands or water . . ." (page 10). Boundary adjustments of the initial inventory areas were made during the intensive inventory, which identified WSAs.

58B. The Bureau feels that the 79,770 acres of BLM wilderness recommended and the 161,480 acres of U.S. Fish and Wildlife Service lands presently in Congress pending wilderness designation adequately meet the need for representative prairie grassland ecosystems in the National Wilderness Preservation System. It is felt that with five BLM areas which can be water accessed and 15 USFWS areas which are also accessible by the Missouri River or Fort Peck Lake, that the need for wilderness which can be visited by river recreationists has also been met.

58C. One cannot assume that watercraft borne visitors are the only people likely to see these areas or that river recreationists will stay within the Wild and Scenic River Corridor. It is BLM's position that the offsite adverse influences cited as a detriment to solitude values in several of the areas are of significant impact on the overall wilderness quality of those affected areas.

58D. The Wilderness Study Policy, Criteria and Guidelines for Conducting Wilderness Studies on Public Lands (February 1982) is our directive for conducting the Suitability Study. One of the criteria given in this document for determining the suitability of WSAs is the quality of the area's mandatory wilderness characteristics. The emphasis in our direction for analysis of solitude is on, "The opportunities a person has to avoid the sights, sounds and evidence of other people within a particular WSA." Outstanding solitude, therefore, is not just the existence of solitude somewhere in the unit but rather a combination of the elements of size, configuration, topographic and vegetative screening, the impact of outside sights and solitude and the ability of the user to find a secluded spot. BLM's findings were that all WSAs had outstanding opportunities for solitude in some portion of the WSA, but several of the WSAs did not have quality solitude opportunities over the entire WSA.

58E. It remains BLM's position that the Dog Creek South WSA lacks outstanding opportunities for primitive and unconfined recreation.

58F. The first quality standard for analysis and documentation presented in the Wilderness Study Policy is a consideration of Energy and Mineral Resource Values. The standards specify that, "certain information and analysis is related to making a wilderness recommendation" and especially in the case of energy values we would be remiss in not using the material generated in formulating our recommendations for these areas. Yes, the units have been studied for mineral values in the process of developing data for this EIS and will be further studied by USGS/BM as part of the report which will be presented to Congress concerning the wilderness suitability of these areas.

58G. Generally, we have removed the word "conflict" from the FEIS. However, we are required by the Wilderness Study Policy to address the "adverse or favorable social and economic effects" of designation (Quality Standard No. 5) and the manageability of these areas as wilderness. The threat to close access to Dog Creek South is related to the rancher's estimation of social and economic impact of designation on his operation and is also related to the long-term manageability of the area as wilderness. Thus, such statements warrant consideration in the study document.

58H. BLM's position is that Stafford WSA provides some solitude opportunities are reduced by human activities associated with nearby PN Bridge, farmed fields, ranch operations and county roads along with the unvegetated, downsloping landform.

58I. The river is likely to be the avenue of approach for most visitors to the area. However, as some use and certain management functions are likely to be conducted using ground access, the consideration of all access routes in private hands needed to be addressed.

58J. The Wilderness Study Policy requires that we address the relationship of energy and mineral resources and wilderness as it affects the suitability decision. As this WSA has the highest gas potential of any in the study, judging from immediately adjacent gas activity and the area's geology, the energy minerals potential was fundamental in reaching the no wilderness recommendation. However, other considerations also were part of the decision, even if they alone were not pivotal in the decision.

58K. Such gate limited access has been tried before and may be one management solution to the problem of occasional vehicle access into a wilderness area. On roads with an established history of public use such as the Deweese Ridge Cherrystem, we do not think it would be successful. This road has had years of use by hunters, local ranchers monitoring stock and sightseers viewing the fall foliage. On trails occasionally used by only the rancher for a specific purpose, such a concept would be more useful. Specifics of this concept are discussed in the Widlerness Management Policy.

59A. The BLM Proposed Alternative recommends wilderness designation for 5,710 acres within the Seven Blackfoot WSA and nondesignation for 14,540 acres. The areas not recommended contained road corridors and private inholdings. The areas recommended, on the other hand, contain no road access, are apparently natural and are only minorly affected by offsite activities such as farming and motorboat or vehicle use.

59B. There could be problems with access. While restricted access is a concern, the portions of the area are not recommended solely for recreational use but also as a logical physiographic extension of a relatively undisturbed ecosystem in administratively-endorsed wilderness areas in the contiguous CMR.

59C. Wilderness is available to all of society. Use on the three roads which trisect the WSA are projected to continue under all alternatives. It is only the use on vehicle ways in the WSA which would be eliminated in portions recommended suitable. Use can be derived offsite by enjoyment of the scenery from nearby roads or through knowledge of indirect benefits of watersheds or wildlife or just the knowledge that the area exists.

59D. There will be no significant economic impact from the designation of the two segments of Seven Blackfoot. Grazing will not be curtailed although there are three range developments in the areas recommended. Those present can be maintained by any practical means.

59E. Noxious weeds are addressed in Chapter 1 of the FEIS and the Wilderness Management Policy. Presently, there is no established elk herd residing in the Seven Blackfoot WSA. If elk were to become established in this WSA in the future, wilderness designation would have no impact on the control of leptospirosis. The most current and widely used method of controlling lepto in livestock is inoculating every animal in the suspected herd. This method is successful with livestock. Even though several strains of lepto, which causes abortions in pregnant animals, have been found in elk and other wildlife species, the impracticability of inoculating all possible wildlife carriers in the area would rule out this method of control, irrespective of wilderness designations in Seven Blackfoot.

59F. Wilderness management poses one of the great challenges to imaginative land planning. Dispersal of visitors to limit overuse, measurement of visitation to establish carrying capacity, maintenance of natural ecological processes, fire control and sanitation pose only a portion of the management considerations of the wilderness administrator. We feel that Montana's designated wilderness areas are in good shape and are being properly managed.

60A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

61A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

62A. There is no commercial forest land specifically identified in any of the WSAs. Low intensity inventories in the 1960s identified very small patches of isolated lands capable of producing 20 cubic feet per acre per year.

63A. In our standard oil and gas lease stipulations, there are provisions to limit which access roads will be used, to prohibit development or exploration during wet periods, to allow no occupancy or other surface disturbance on slopes of a given gradient or near floodplains or riparian zones, to camouflage facilities and to prohibit activity during certain times of the year for the protection of specific wildlife species. When properly used, these stipulations go far to limit long-term impacts from gas operations in the breaks. In the short term, all exploration and development activities are required to be nonimpairing to wilderness values on post-FLPMA leases. Far less control exists with pre-FLPMA leases (only in Ervin Ridge WSA), but BLM is still charged with the requirement to try to negotiate with the leasing company to obtain minimum impact on wilderness resources.

63B. The rationale for identifying WSAs as a result of the inventory are in the Montana Final Inventory Decision (11/80). The criteria involved mineral development only to the extent that past or current activities reduced wilderness values. In the study phase, of which the FEIS is a component, the impact of development activities on wilderness values and the effect of wilderness designation on limiting exploration and drilling work on publicly managed lands are considered.

63C. To be more exact, 8 percent of the Woodhawk WSA is within 1/4 mile of a Wild segment of the Missouri NWSR and is thus unavailable for mineral exploration. The remaining leased acreage in the Wild and Scenic River Corridor does carry protective lease stipulations. We believe that the mineral scenarios for the various alternatives reflect UMWSR factors and topographic and access considerations that you raise.

63D. It is true that the visual impact of the reservoir complex in the southern portion of Woodhawk does not outweigh natural values. Their existence is an impact on the naturalness of the unit, however, and maintenance of these projects does pose a long-term periodic impact on wilderness values.

63E. Conflicts between motorized and nonmotorized users can be expected to be infrequent given the low use which would probably be made of the area if designated. However, the potential for adverse influence on solitude from passing vehicles is always present and would increase with an increase in either motorized or nonmotorized vegetation.

63F. BLM stands by its position that a few isolated portions of Dog Creek South and Stafford do contain outstanding opportunities for solitude and neither contain primitive recreation opportunities. This is due to major offsite activities. This level of wilderness quality, when considered with minerals and access factors, leads to no wilderness as the proposed action.

63G. The State of Montana has indicated its readiness to exchange out-of-state sections presently inside BLM WSAs if the units are designated. West Cow Creek and Chimney Bend, however, are beyond the scope of this document.

63H. As stated above in 63A, BLM's standard oil and gas lease stipulations do prevent undue and unnecessary degradation on developed leases. The environmental assessment process mandated by the National Environmental Policy Act helps protect natural values, scenery and wildlife when a development project is under consideration.

63I. By issuing oil and gas leases, the federal government has indicated its willingness to have such resources extracted and by purchasing the leases, the energy industry has shown a willingness to invest in development. Given this, roads will probably be one of the results of oil and gas development. In our stipulations we place sensitive wildlife habitat and slopes above a certain angle off limits to surface occupancy. Depending upon access needs, we do put some abandoned oil and gas roads "to bed."

63J. The buried pipeline, which was proposed, was an insignificant reason for selecting the no wilderness alternative for Musselshell Breaks and Bridge Coulee WSAs. The combination of low wilderness quality and resource potential projected management activities were factors in the decision for these WSAs.

63K. The BLM has considered the wilderness values and the potential resource conflicts in Segment C of Seven Blackfoot and arrived at the recommendation of nonsuitable for wilderness. You have weighed the same factors and arrived at another conclusion.

64A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

64B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State. Chimney Bend is not a Wilderness Study Area and no recommendation is appropriate regarding further acquisitions.

65A. In a series of public hearings, public meetings and personal meetings over the last 4 years, BLM representatives have informed the public on the wilderness issue. Judging from many of the well reasoned and literate response letters we have received on the Draft Suitability Report/EIS, we feel we have succeeded. We have provided the public with the facts in an unbiased manner and it is then the public's right to draw their own conclusions.

65B. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

66A. Thank you for your letter.

67A. The FEIS documents a number of manmade developments within the Cow Creek WSA. In the majority of the unit, the land, however, retains the overall appearance of naturalness. The disturbance from the developments is often site specific screened by the rugged terrain and/or vegetation. The FEIS discusses reservoirs, a spring development, vehicle ways, fences, seven dry gas well sites and 1 mile of powerline. In addition, there are five roads totaling 11.3 miles which have been cherry-stemmed. The unit's boundaries have been drawn so as to exclude these roads from the area under study for wilderness. The developments described, for the most part in points A-N of your comments, are documented. In some cases, the projects are located on or near section lines and the legal descriptions in the Draft do not agree with the legals you have provided.

The impacts of all the manmade features were analyzed in the development of the partial wilderness alternative selected as the BLM's proposal. Several of the developments and sights and sounds of man you describe, particularly in points, I, J, K and L, have been excluded with the proposed partial alternative.

67B. In the specific case of point D, the cherry-stemmed road to the reservoir in Section 27 will be extended to the South End Reservoir in T. 24 N., R. 22 E., SE¼SW¼, Section 34. Further field review and monitoring of this area has shown that there is regular and continuing use to that point. Beyond the South End Reservoir, there has been no maintenance or regular and continuing use. The vehicle ways that branch off the above road receive only periodic use and are maintained by the passage of vehicles.

67C. The Proposed Alternative (partial wilderness) for Cow Creek contains boundaries along identifiable features such as roads and associated ridge lines whenever possible. In certain cases, the boundary is drawn along legal lines which create in several places in Cow Creek, narrow and apparently erratic boundaries, especially when observed on a map. On the ground, however, a common pattern of landownership in the breaks helps to identify the public lands. The most rugged and nontillable land has remained in public ownership while the tillable, less rugged lands are deeded and often are farmed up to or near the boundary. In the case of Cow Creek, extensive timber and deep drainages bordering deeded land help to screen offsite activities, are natural and retain opportunities for solitude conducive to wilderness.

68A. The potential for energy resources such as oil and gas is an important consideration in the recommendation of an area for wilderness designation. For those areas recommended, the wilderness values must balance the possible resource values foregone through designation. This was the case in the Cow Creek, Antelope Creek, Burnt Lodge and Terry Badlands recommendations. It is important to remember that this FEIS is only a component of wilderness study. A USGS/BM mineral report must be prepared for each suitable area prior to consideration of the recommendations by Congress. This report should include the most current information on mineral potential.

68B. We recognize that recreational use of the Missouri Breaks and Terry Badlands is relatively low and mainly associated with hunting and recreational use of the Missouri and/or Yellowstone rivers. This type and level of use of the areas should not change significantly with wilderness designation.

69A. The FEIS documents a number of manmade developments with the Antelope Creek WSA. The WSA, however, retains the overall appearance of naturalness. The disturbance from the developments is often site specific, screened by the rugged terrain and vegetation. The road which you mention in point 2 has been identified in the Draft and divides the Antelope Creek WSA into two separate roadless areas. Several of the roads and reservoirs you mention in your comment letter are outside the WSA boundaries and do not significantly impact the wilderness values of the WSA. Those developments within the area and the offsite impact of both U.S. 191 and the mining operation in the Little Rockies were considered in the development of the BLM's partial wilderness alternative. The Proposed Alternative recommends that the area adjacent to U.S. 191 (the eastern roadless area) not be designated as wilderness.
69B. This recommendation also makes the road in T. 23 N., R. 23 E., Sections 21, 28 and 33 the eastern boundary of the area recommended for wilderness. The BLM's proposed action would keep the main vehicle access to the heart of the Antelope Creek area open and allow continued use by those who have frequented the area in the past.

70A. There are only limited portions of the Cow creek and Antelope Creek WSAs that ever contained permanent homesites. In those rare cases, the residents have long since vacated and natural processes have restored much of the natural appearance to disturbed areas.

There are five roads which enter the Cow Creek WSA and terminate within the public land boundaries. Each of these cherry-stemmed roads are outside the WSA boundaries and are not considered as part of the study area. As such, they would remain open if the area were designated and would continue to provide vehicle access to the edge of the most rugged and wild portions of the WSA. In addition to the five cherry-stemmed roads in Cow Creek, there are approximately 24 miles of vehicle ways in Cow Creek and 11 miles of vehicle ways in Antelope Creek. These routes would be closed to the general public if the areas were designated. However, the ranchers would have limited use of these ways to maintain range facilities, distribute supplies or equipment and respond to emergencies.

70B. There will be no reduction in grazing because of wilderness designation and, as such, these areas will continue as a source for livestock production.

70C. While it is true that wilderness designation could restrict development of energy resources, no reserves have been specifically identified to date. Structurally both Cow Creek and Antelope Creek have high potential for natural gas, but no commercial quantities have been located even though a number of wells have been drilled. There are no commercial quality coal deposits identified in either of the study areas. A wilderness established by statute could be opened by statute to allow for mineral development, if it is in the national interest to do so. Before a final recommendation of suitability is sent to the President and Congress, a further mineral report must be prepared by the USGS/BM. This information will be forwarded to Congress and considered in their deliberation on wilderness designation.

71A. Many of the points made were and will be considered in the study in making our recommendation for no wilderness. The proposed action analyzed for Woodhawk is nondesignation as wilderness.

71B. In response to the comment on restrictions on grazing, many factors are considered in determining the carrying capacity of the range. Wilderness designation itself does not contain any requirement to reduce or eliminate grazing. Congressional actions have shown the clear intent of Congress is that grazing can be compatible with wilderness designation and that those facilities needed in support of grazing are also compatible in designated wilderness and can be maintained to ensure continuation of grazing.

72A. There will be little or no reduction in the local county tax base due to wilderness designation of the five areas recommended. Funding for schools would not be affected. Any lands designated for wilderness would remain open for hunting. The EIS considered the impact of wilderness designation on both hunting access and wildlife populations. For those areas recommended suitable, a significant amount of access would still be available on bordering roads and cherry-stemmed roads to allow for continued vehicle-based hunting. Game retrieval would be more difficult in certain cases where game was killed long distances from roads or open vehicle ways outside of the WSAs.

72B. The BLM does not plan to hire additional staff to monitor areas designated as wilderness. There should not be additional costs to taxpayers.

73A. There are five cherry-stemmed roads in Cow Creek but none in Antelope Creek. The cherry-stemmed roads and the road which divides Antelope Creek into two segments would remain open even if the two areas are designated as wilderness. The vehicle ways would be closed to general use. They would remain open to the grazing permittees for maintenance of range facilities such as reservoirs and fences, the distribution of supplies or equipment and to respond to emergencies such as sick stock, frozen water sources, breaks in fences, etc.

73B. The existence of a number of manmade developments dispersed over 45,000 acres of extremely rugged terrain does not significantly affect the apparent overall naturalness of much of the Cow Creek and Antelope Creek WSAs. The impacts on naturalness are primarily site specific. The FEIS analyzes a partial wilderness alternative that eliminates a number of the manmade features for both Cow Creek and Antelope Creek WSAs.

73C. Oil and gas potential and projectivity is considered for these areas. A USGS/BM report must be prepared on the mineral values of each area recommended suitable prior to submission to the President and Congress. All pre-FLPMA leases in Dog Creek South, Antelope Creek, and Cow Creek have expired without production.

73D. Wilderness is consistent with multiple uses of public lands. The designation of lands as wilderness does not infer single use. Other multiple-use activities such as watershed protection, wildlife management, grazing and recreation are compatible to varying degrees. Not all multiple uses are mandatory for all tracts of land. Some use or uses are more appropriate than others even though a tract is part of a multiple-use concept.

74A. The cherry-stemmed roads identified during inventory would remain open under all alternatives analyzed for Cow Creek WSA. Vehicle ways would be closed in those portions designated as wilderness.

74B. In response to the comment on restrictions on grazing, many factors are considered in determining the carrying capacity of the range. Wilderness designation itself does not contain any requirement to reduce or eliminate grazing. Congressional intent is that grazing be compatible with wilderness designation and that those facilities needed in support of grazing, such as reservoirs, are also compatible in designated wilderness and can be maintained to ensure continuation of grazing. The FEIS is consistent with this intent, which is discussed in the Wilderness Management Policy.

75A. The existence of a number of manmade developments dispersed over 45,000 acres of extremely rugged terrain does not significantly affect the apparent overall naturalness of much of the Cow Creek and Antelope Creek WSAs. The impacts on naturalness are primarily site specific. The Missouri Breaks Wilderness Suitability Study/EIS recommends a partial wilderness alternative that eliminates a number of the manmade features for both Cow Creek and Antelope Creek WSAs. The impacts of the remaining developments, outside sights and sounds were analyzed in the Draft EIS under Impacts, Partial Wilderness Alternative 1 on pages 119 and 120. It was determined that the wilderness values balanced those conflicts.

75B. The FEIS notes that most of the recreational use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. The FEIS did identify, however, a potential impact to a number of vehicle-dependent persons who might travel vehicle ways.

75C. Maintenance of existing range projects including water facilities would be allowed. The BLM's Wilderness Management Policy states that reservoirs could be repaired with heavy equipment normally used in this area for reservoir repair.

76A. There are only limited portions of the Cow Creek and Antelope Creek WSAs that ever contained permanent homesites. In those rare cases, the residents have long since vacated and natural processes have restored much of the natural appearance to disturbed areas.

There are five roads which enter the Cow Creek WSA and terminate within the public land boundaries. Each of these cherry-stemmed roads are outside the WSA boundaries and are not considered as part of the study area. As such, they would remain open if the area were designated and would continue to provide vehicle access to the edge of the most rugged and wild portions of the WSA. In addition to the five cherry-stemmed roads in Cow Creek, there are approximately 24 miles of vehicle ways in Cow Creek and 11 miles of vehicle ways in Antelope Creek. These routes would be closed to the general public if the areas were designated. However, the ranchers would have limited use of these ways to maintain range facilities, distribute supplies or equipment and respond to emergencies.

76B. While it is true that wilderness designation could restrict development of energy resources, no reserves have been specifically identified to date. Structurally both Cow Creek and Antelope Creek have high potential for natural gas, but no commercial quantities have been located even though a number of wells have been drilled. There are no commercial quality coal deposits identified in either of the study areas. Wilderness established by statute could be opened by statute to allow for mineral development, if it is in the national interest to do so. Before a final recommendation of suitability is sent to the President and Congress, a further mineral report must be prepared by the USGS/BM. This information will be forwarded to Congress and considered in their deliberation on wilderness designation.

77A. The roads described are no longer being regularly used or maintained but there are still remnants of both. Neither of these old roads are within the present boundaries of the Cow Creek WSA and their existence was not considered in the recommendation for Cow Creek.

77B. Economic impacts on the ranchers from Cow Creek are considered in Chapter 4. Because the Wilderness Management Policy allows for continuation of grazing activities with some restrictions, the economic impact on surrounding businesses is estimated to be low.

78A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

79A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

79B. BLM's Proposed Alternative for Cow Creek recommends acquisition and designation of the State section if suitable agreements can be made with the State.

80A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

81A. The Wilderness Management Policy allows for the control of coyote populations by or under direction of the U.S. Fish and Wildlife Service, the BLM or State agencies to prevent serious losses of domestic livestock on adjacent lands.

82A. While the FEIS documents all the known manmade developments in each of the WSAs, the BLM's proposed action was based on a number of considerations. Factors such as oil and gas potential, grazing operations, inholdings, and other wilderness values were important considerations.

82B. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

83A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

84A. The acreage you recommend totals approximately 4,160 acres. The resulting boundary has virtually no correspondence to on-the-ground features. Terry Badlands Partial Wilderness Alternative 1 includes all the lands which you indicate meet the wilderness criteria for inclusion in the NWPS. In addition, Partial Wilderness Alternative 1 contains approximately 16 additional sections of roadless public lands with the same high wilderness values and limited resource conflicts. The Bureau's Wilderness Study Policy established criteria for development of partial wilderness alternatives. They are that the provisions either reduce resource conflicts or improve the potential for long-term manageability as wilderness. The comment, while suggesting a new partial alternative, makes no reference to any factors which meet the two above criteria.

JORDAN, MONTANA PUBLIC HEARING

Kenneth Coulter

101A. Chapter 1 discusses control of fire and noxious weeds for each WSA. The Wilderness Management Policy (9/81) provides the policy for this concern. More specifically, fire management plans would be completed for any WSA designated as Wilderness. Irrespective of the role of neighboring ranchers the objective of preventing loss of life and property within the Wilderness and preventing the spread to areas threatened outside of Wilderness would be paramount.

The Wilderness Management Policy allows chemical and some other control of noxious weeds where they present a threat to adjacent lands or to livestock within a wilderness area. Air quality standards are set and adjusted by the State. All BLM lands were designated as Class II by the 1977 Clean Air Act amendments. Any further reclassification is not the prerogative of the BLM.

101B. This statement has been removed as it is a misprint.

Dave Huston

102A. The negative attitude of most local residents toward wilderness designation is and will continue to be well documented in the inventory, study, and reporting.

102B. It is the private landowner's right to allcw or disallow access through their lands to public lands. However, we hope that the ranching community will continue its practice of generally permitting the public access to these larger blocks of public land. Use and benefits on wilderness may be derived offsite, such as through enjoyment of the scenery at a distance, through indirect benefits from the area's resources (i.e., water quality, wildlife, etc.) or just the knowledge that the area exists.

George Wilson

103A. Most of the recreational use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. The EIS did identify, however, a potential impact to a number of vehicle dependent persons who might travel the vehicle ways to view the spectacular scenery available in the study areas and surrounding river breaks.

BLM has noted in the EIS the impact of wilderness designation on vehicle dependent visitors. Substantial research points to the typical wilderness users as being college educated or college students, holding higher paying jobs in professional, managerial and scientific fields.

103B. It is the private landowner's right to allow or disallow access through their lands to public lands. However, we hope that the ranching community will continue its practice of generally permitting the public access to these larger blocks of public land.

Jerry Coldwell

104A. Wilderness areas are public lands that have not seen extensive development and remain apparently natural. The FEIS clearly documents that there are manmade developments in each of the WSAs.

104B. These developments for the most part have site-specific impacts which are screened from any distance by rugged terrain and vegetation. While there is no exact measurement as to what use the general public will make of areas designated wilderness, Congress in passage of the Wilderness Act and the BLM in formulation of its Wilderness Management Policy, recognized a variety of benefits of wilderness to society. "Use might be 'onsite,' taking direct advantage of the multiple resources of the area. Or the use and benefits may be derived 'offsite,' such as through enjoyment of the scenery at a distance from a nearby highway, through indirect benefits from the area's resources (i.e., water quality, wildlife, etc.), or just the knowledge that the area exists."

TERRY, MONTANA PUBLIC HEARING

John Pfaff

105A. The acreage you recommend totals approximately 4,160 acres. The resulting boundary has virtually no correspondence to on-the-ground features. Terry Badlands Partial Wilderness Alternative 1 includes all the lands which you indicate meet the wilderness criteria for inclusion in the NWPS. In addition, Partial Wilderness Alternative 1 contains approximately 16 additional sections of roadless public lands with the same high wilderness values and limited resource conflicts. The Bureau's Wilderness Study Policy established criteria for development of partial wilderness alternatives. They are that they either reduce resource conflicts or improve the potential for long-term manageability as wilderness. The comment, while suggesting a new partial alternative, makes no reference to any factors which meet the two above criteria.

James Phelps

106A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged. Therefore, the WSA boundaries in the FEIS are identical to those in the DEIS.

MALTA, MONTANA PUBLIC HEARINGS

Ray Shores

107A. The access route through Burnt Lodge WSA that enters public lands in T. 23 N., R. 33 E., Section 28 and proceeds down Blue Ridge to the private lands in the northeast corner of the NW¼ of Section 33 receives regular and continuous use and does provide the only reasonable access to your holdings. The BLM, therefore, will modify its wilderness inventory and suitability recommendation to exclude the 120 acres west of the Blue Ridge Access Road in the FEIS. The road will become the eastern boundary of the area recommended for wilderness designation. From the point that the Blue Ridge Road exits your private holdings and continues through public lands to its end in Section 34, there is not evidence of continuing maintenance and the way would be closed if the area was designated wilderness.

107B. Fire control in Burnt Lodge is discussed in Chapter 1. Fire control policy is discussed in the "Wilderness Management Policy (9/81)." Because of the configuration of Burnt Lodge, most fires would have the potential to burn onto adjacent private lands. If the area is designated Wilderness, a fire management plan is required. It will reflect this policy and the specific characteristics of the area.

Charles Barnard

108A. In the 1920s and 30s, wildlife populations were at a low ebb throughout the northern Great Plains due to compounding problems; market hunting, poor conservation practices in farm and ranch operations and drought conditions. Since the 1930s, the State has actively regulated hunting and farm and ranch operations have implemented soil conservation practices. The use of grazing systems, water developments and fencing on public lands has improved the wildlife habitat and in conjunction with hunting controls has enabled wildlife populations to recover from their low numbers of the 1930s. The Bureau's Wilderness Management Policy allows for wildlife management, including hunting and continuation of livestock grazing with the associated maintenance of grazing developments. The FEIS is consistent with this policy. These actions should allow for continuation of favorable conditions to support wildlife populations.

Buddy Linstrom

109A. The FEIS considers access for downed game as a possible component of hunting pressure in the interior portions of several of the areas and the effect on big game populations. Hunters may be required to pack game out on their backs or with horses. A similar problem has existed on adjacent CMR Wildlife Refuge with the closure of many vehicle accesses or elimination of off-road vehicle travel. Hunting has continued in these areas in spite of the closures and hunters through knowledge of which roads are open have been able to plan their hunts so as to retrieve downed game with minimal spoilage reported.

Randy Skinner

110A. Thank you for your testimony.

WINIFRED, MONTANA PUBLIC HEARING

Burleigh Letter — Farm Bureau

111A. Wilderness, as demonstrated in passage of the Multiple Use-Sustained Yield Act of 1960, the Wilderness Act of 1964, and the Federal Land Policy and Management Act of 1976, is considered by the Congress to be one of several multiple uses of the public lands. Multiple use is an attempt to optimize the net benefit to society from public lands, but it does not mean that every use has to occur on every tract of land.

111B. Congress has made its position clear that grazing will continue in designated wilderness areas. Two House Committee on Interior and Insular Affairs Reports (95-620 and 95-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be closely followed.

111C. The FEIS is clear on continuing control of predation problems (See Chapter 1) and for chemical control of noxious weeds.

Gene Chapel — Montana Farm Bureau Federation

112A. The initial inventory included all public lands and identified, on the basis of maps, roadless areas. Over the next 2 year, a number of field inventories combined with public review and comment led to the Montana BLM State Director's final decision of WSAs. Indeed, the total number of acres considered has been reduced significantly through this process.

112B. While Wilderness does require some careful planning in other multiple uses of the lands, Wilderness does not prohibit or reduce present levels of grazing, recreational use or wildlife management. Most of the recreational use of the WSAs recommended for Wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. However, a potential impact would occur to a limited number of vehicle-dependent persons who might travel the vehicle ways to view the spectacular scenery available in the study areas and surrounding river breaks. This is discussed for each WSA.

112C. The areas that remained for study as WSAs, contain some manmade developments. However, they have adequate size and sufficient topographic and/or vegetative screening to appear natural. The signs of man's present or past use can still be located through the study areas, but the impacts are primarily site-specific. This is explicitly treated for each WSA throughout the FEIS.

112D. The State section inholding in Cow Creek is clearly documented in the FEIS. This section, if not acquired by the BLM, contains similar wilderness values as the adjoining BLM land. There is already adequate vehicle access to the State section from the Winter Ridge Road. No additional road is necessary through the BLM. If the grazing permittee for this section requires vehicle access for maintenance of facilities, it would be allowed even if Cow Creek were designated as wilderness.

112E. It is BLM's position that the borders recommended in the proposed alternative constitute a manageable boundary. Indeed, this was a major factor in determining the boundary.

112F. All pre-FLPMA leases that existed in Cow Creek WSA or Antelope Creek WSA have expired.

112G. The economic impact of wilderness on affected individual and county residents is addressed in the document using much of the base data generated by Dr. Leroy Luft. While a potential cost to the ranchers is indicated, the dollar figures are quite low. In the case of the areas recommended suitable, the wilderness values to the general public were determined to balance the small, additional costs that may accrue to individual users.

Will Brooke

113A. The designation of lands as wilderness does not automatically infer either additional benefit or detriment to wildlife. The FEIS discusses the impacts by WSA of reduced hunting on wildlife populations. Generally it concludes that because of the relatively small size and available access along the boundaries of the WSAs, wildlife population levels would not change significantly.

113B. Chapter 1 of the FEIS discusses noxious weed and predator control. It is consistent with the Wilderness Management Policy (9/81).

113C. The FEIS discussed gas and minerals potential. Every area that is recommended by the Secretary of the Interior as suitable to the President and Congress must be accompanied by a USGS/BM mineral report which will include additional mineral information.

113D. The estimated impacts on managing allotments is discussed by WSA in Chapter 4. The relationship between lending and wilderness designation is noted in Chapter 3.

113E. Three proposed projects are identified in Cow Creek WSA, but none in the proposed action alternative. Chapter 2 of the FEIS identifies, by WSA, proposed projects. It should be noted that a case-by-case determination has not been made as to whether these proposed projects are consistent with grazing plans or cultural, wildlife, wilderness, or other resource values.

113F. The Antelope Creek WSA contains outstanding opportunities for solitude, especially in the western 9,600-acre Partial Wilderness Alternative 1. This segment (the western roadless area) does stand on its own merits. Its contiguity with CMR enhances the wilderness values of size and opportunity for solitude. The 2,750-acre eastern parcel, Partial Wilderness Alternative 2, is impacted to some degree by its proximity to U.S. 191.

113G. The Bureau has looked carefully at the IBLA case you allude to, Tri County Cattlemen's Association, and other IBLA decisions related to the Wilderness review process. A distinction is made between those areas which the Secretary has authority to study under Sections 202 and 302 of the FLPMA and those which fall under the statutory mandate to report to the President under Section 603 of FLPMA. Authority exists to study all of the areas you mention and the BLM has chosen to do so. The mandate to report recommendations applies (at least) to the west roadless area in Antelope Creek and the southern roadless area in Seven Blackfoot.

113H. Chapters 3 and 4 of the FEIS discuss these factors on wilderness values. The acquisition of the State and private land identified in the Draft would be a substantial benefit to the overall continuity of the Burnt Lodge WSA, but the recommendation of suitable for wilderness does not hinge on those acquisitions. The high wilderness values dictate the overall recommendation.

113I. The Terry Badlands, by virtue of its extremely rugged character, has retained its natural appearance and does not provide outstanding opportunities to experience solitude. While the threat of change to the natural character is limited by terrain, there is always the potential for some development. The legislative protection provided by wilderness designation would ensure the long-term continuation of this area's unique and outstanding wild character.

Martin Udelhoven

114A. The existence of a number of manmade developments dispersed over 45,000 acres of extremely rugged terrain does not significantly affect the apparent overall naturalness of much of the Cow Creek and Antelope Creek WSAs. The impacts on naturalness are primarily site specific. The FEIS analyzes a partial wilderness alternative that eliminates a number of the manmade features for both Cow Creek and Antelope Creek WSAs.

Don Simpson

115A. All pre-FLPMA leases in Cow Creek and Antelope Creek have expired due to lack of production.

Every area that is recommended by the Secretary of the Interior as suitable to the President and Congress must be accompanied by a USGS/BM mineral report. Any nearby drilling prior to that report that results in a discovery of economically recoverable energy resources would be made available to Congress in determining whether either Cow Creek or Antelope Creek should be designated as wilderness.

Cleo Phillips

116A. The definition of wilderness is somewhat subjective. The Bureau of Land Management was directed to consider wilderness as it was defined by Congress in the Wilderness Act of 1964. Wilderness is an area where man is a visitor and does not remain. It is an area which appears to be affected primarily by the forces of nature and not of man. Congress has clearly indicated in their recent legislation that it did or does not intend other multiple-use activities such as grazing to be reduced or eliminated because of wilderness designation. The Bureau of Land Management's Wilderness Management Policy clearly follows this intent.

116B. Most of the recreation use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. The FEIS did discuss impacts to a limited number of vehicle-dependent persons who might travel the vehicle ways to view the spectacular scenery available in the study areas and surrounding river breaks.

116C. In the area that has been designated as the Upper Missouri Wild and Scenic River Corridor, an area primarily from rim to rim on both sides of the Missouri and including all the bottom lands, 66 percent has always been in public ownership and was not homesteaded. In addition, approximately 8 percent is now in State ownership and also was not homesteaded. These lands retain their native vegetation primarily undisturbed by man. Native wildlife can and have thrived on this vegetation.

116D. The FEIS discusses the mineral potential of Cow Creek and Antelope Creek.

William E. Williams

117A. Wilderness designation would have a different impact on recreationists who are vehicle dependent than those who are seeking a primitive and unconfined type of recreation.

117B. The distinction between road and vehicle way is based on Congressional language associated with the Federal Land Policy and Management Act.

117C. Your comments, while not directly saying so, suggest that grazing operations would no longer occur within wilderness. Congress has made its position that grazing will continue in designated wilderness quite clear. Two House Committee on Interior and Insular Affairs Reports (95-620 and 95-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be closely followed.

117D. While it is not clear whether your comment suggests it, recommendations for wilderness designations are in no way intended as an insult to the stewardship shown by ranchers in the Missouri Breaks.

James Hill

118A. There is no evidence that wilderness designation would affect the value of deeded land owned by those operators having grazing permits in wilderness. Several lending institutions have indicated they would not value loans for those grazing privileges in lands designated as wilderness. Total loan value reduction spread over all the operators in the five areas recommended for wilderness could be as much as $933,000.

118B. The vehicle ways in areas designated as wilderness will be open to permittees for the maintenance of range projects, delivery of supplies and equipment and emergencies. Such activity would be specified in a Wilderness Management Plan for each area designated.

118C. Wilderness, as demonstrated in passage of the Multiple Use-Sustained Yield Act of 1960, the Wilderness Act of 1964, and Federal Land Policy and Management Act of 1976, is considered by the Congress to be one of several multiple uses of the public lands. Multiple use is an attempt to optimize the net benefit to society from public lands, but it does not mean that every use has to be optimized on every tract of land.

118D. The definition of a road in the "Wilderness Inventory Handbook," September 1978, was based upon the Congressional House Report which accompanied the Federal Land Policy and Management Act, it is clear from the language in FLPMA's legislative history, that Congress intended BLM to follow the definition in the House Report. The BLM used this definition during inventory, which involved considerable involvement with the public. The identification of roads reflects that inventory and subsequent IBLA appeals.

118E. Chapter 1 of the FEIS and the "Wilderness Study Policy (9/81)" both address weed control.

118F. Oil and gas lease status is discussed in Chapter 3.

Louise Butcher

119A. Preference is a major factor in whether an individual practices one type of recreational pursuit rather than another. There are many other factors, such as people who are vehicle dependent, that are also important.

119B. In response to the comment on restrictions on grazing, many factors are considered in determining the carrying capacity of the range. Wilderness designation itself does not contain any recruitment to reduce or eliminate grazing. Congressional actions have shown the clear intent of Congress is that grazing can be compatible with wilderness designation and that those facilities needed in support of grazing are also compatible in designated wilderness an can be maintained to ensure continuation of grazing. We do not believe the situation you describe on USFWS is attributable to wilderness designation.

Garde Peterson

120A. The FEIS notes the manmade developments within the Cow Creek WSA. In the majority of the unit, the land, however, retains the overall appearance of naturalness. The disturbance from the developments is often site-specific, screened by the rugged terrain and/or vegetation.

120B. Grazing permits will not be affected if the area is designated wilderness. The areas will continue as a basis of revenue for both the permittees and the BLM.

120C. A more current lease status is discussed in Chapter 3. The Cow Creek analysis reflects the potential for gas.

Lorraine Schwenke

121A. Chapter 3 of the document describes these facilities.

121B. The vehicle ways in both Cow Creek and Antelope Creek would be closed to general recreational use but would remain available to grazing permittees for specified maintenance of range facilities such as reservoirs and fences, the distribution of supplies and equipment and to respond to emergencies.

121C. Congress has made its position that grazing will continue in designated wilderness quite clear. Two House Committee on Interior and Insular Affairs Reports (95-620 and 95-1321) and language in the Colorado RARE II Bill specifically provide guidance as to how the Wilderness Act should be developed. BLM's Wilderness Management Policy (September 1981) reflects this guidance and will be closely followed.

121D. The FEIS examined sources of income in the affected counties and concluded that there would be no significant reduction in any affected county incomes.

121E. It is difficult to either substantiate or refute the statement that an elite group or reservationists are the only beneficiaries of wilderness designation. Some argue that wilderness is necessary for the spiritual values and well-being of society in general whether or not they ever hike in or even view the areas. While there have been studies that indicate the average annual income of wilderness users is slightly above the national average per capita income, the money spent per day for such activities is below that spent per day on most other forms of recreation.

121F. The Multiple Use-Sustained Yield Act of 1960, the Wilderness Act of 1964, and the Federal Land Policy and Management Act of 1976, recognize and define the position of wilderness in multiple-use management.

121G. There is one designated area, UL Bend, and 15 additional study areas of the same ecotype already endorsed for wilderness in the nearby Charles M. Russell National Wildlife Refuge. These 16 areas include 182,327 acres. If the CMR study is designated as wilderness, the BLM WSAs would not be necessary solely for balancing the ecotype diversity of the NWPS.

Several of the areas recommended suitable for wilderness, however, are outstanding examples of the river breaks landform and would augment the scenic quality of the wilderness system. The management direction of the remaining 1,000,000-acre CMR Wildlife Refuge not recommended for wilderness is beyond the scope of this Study/EIS.

121H. Approximately 5.9 percent of the 34,050-acre Cow Creek WSA is within the Wild and Scenic River Management Corridor. Approximately 35 percent of Antelope Creek is within the management corridor. While the river designation does provide some protection, the area within Antelope Creek is considered Scenic rather than Wild and does not provide the level of protection associated with wilderness designation.

121I. Both the northern and southern and a portion of the western boundaries of the Cow Creek WSA border other public or state lands. Much of the east side borders on private lands. While access to the center of Cow Creek is through private lands, there is good access by both the north and south.

Dick Knox

122A. The definition of a road in the Wilderness Inventory Handbook, September 27, 1978, was based upon the Congressional House Report which accompanied the Federal Land Policy and Management Act. It is clear from the language in FLPMA's legislative history that Congress intended BLM to follow the definition in the House Report. This definition was applied and refined through inventory, public comment and IBLA decisions.

122B. We realize that you are not suggesting the BLM has ignored works of man. The Bureau has documented where man's works remain, including vehicle ways, inside the study areas. It is our position that we have not ignored manmade impacts, but have rather found them to be not a significant adverse influence either singly or overall on the apparent naturalness of the WSAs.

122C. There has been no attempt to eliminate roads from Cow Creek or Antelope Creek WSA to create an "artificial" wilderness. Cherry-stemming is a reasonable method of drawing boundaries to allow the study of all lands in a unit possessing wilderness characteristics.

122D. Although offsite intrusions were not considered as a dominant criterion in the original inventory, they were fully documented and considered in the study phase of the BLM wilderness review process. See Chapter 3 of the FEIS.

122E. Although the boundaries of the Cow Creek and Antelope Creek WSAs were almost totally on legal subdivisions, the boundaries of partial alternatives often follow topographic boundaries and roads and are much more identifiable on the ground. It is BLM practice, as stated in the Wilderness Management Policy, September 1981, to provide only minimal signing for visitor safety and resource protection. No boundary markers will be placed in a blanket manner in designated wilderness areas.

122F. All pre-FLPMA leases that existed in Cow Creek and Antelope Creek have expired. Every area that is recommended by the Secretary of the Interior as suitable to the President and Congress must be accompanied by a USGS/BM mineral report. Any drilling prior to that report that results in a discovery of economically recoverable energy resources would be made available to Congress in determining whether either Cow Creek or Antelope Creek should be designated as wilderness.

122G. The results of Dr. Luft's study are reflected in the FEIS and will continue to be considered during wilderness study.

E. Butcher

123A. The existence of a number of manmade developments dispersed over 45,000 acres of extremely rugged terrain does not significantly affect the apparent overall naturalness of much of the Cow Creek and Antelope Creek WSAs. The impacts on naturalness are primarily site specific. The FEIS analyzes a partial wilderness alternative that eliminates a number of the manmade features for both Cow Creek and Antelope Creek WSAs.

123B. Our analysis concludes that there would be no significant reduction in any of the affected counties' incomes. The property tax base would not be changed. There are presently no local tax monies being generated from minerals within the WSAs.

Robert Bold

124A. The journals of Lewis and Clark indicate abundant wildlife species in the Missouri Breaks, some of which have become extinct because of a variety of factors. It is impossible, however, to compare present day wildlife population levels to those of that period.

124B. It should be noted that the term multiple-use management includes wilderness and the two terms are not mutually exclusive. Congress has stated in the Multiple Use-Sustained Yield Act of 1960 that "the establishment and maintenance of areas of wilderness are consistent with the purposes of this act." The Wilderness Act of 1964 and the Federal Land Policy and Management Act of 1976 support the view that multiple use and wilderness designation need not be mutually exclusive.

Beth Bergum

125A. The FEIS concludes that there would be no significant reduction in any of the affected counties' incomes. There are presently no local tax monies being generated from minerals within the WSAs. Grazing permits will not be reduced because of wilderness. The opportunity to generate revenue from grazing public lands will not be reduced due to wilderness designation.

125B. We recognize the stewardship shown by ranchers in the Missouri Breaks. If anything, the recommendations show conservation the the range users in that they have continued a successful cattle grazing program with only minimal disturbance of the natural land features.

125C. Wilderness management creates challenges. Wilderness is often viewed as some land with a line drawn around it and then forgotten. In light of recreational uses of the areas and the objective of securing an enduring wilderness resource for present and future generations, wilderness management will be an active program. Visitor use patterns will have to be considered. Regulations will be enforced, litter will be removed and emergency assistance will be provided.

125D. The recreational use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of those users are physically able to withstand the rigors of this rugged country. A number of vehicle-dependent persons who might travel the vehicle ways to view the spectacular scenery available in the study areas and surrounding river breaks would be affected. In the case of Cow Creek, the cherry-stemmed roads provide vehicle access to some of the most scenic portions of the WSA. In the Antelope Creek, the road that segments the WSA into two parts would remain open and provide easy access by vehicle to those otherwise unable to get to the interior of the WSA.

HELENA, MONTANA PUBLIC HEARING

Mons Teigen

126A. The decision of which routes inside the WSAs were vehicle ways and which were roads was made during the inventory phase of wilderness review. The results were published as the State Director's Final Inventory Decision of November 1980. This EIS has analyzed those WSAs using the road determinations from the intensive inventory and at no time were those results changed from the purposes of the present study.

126B. Montana has 3,172,339 acres of designated wilderness in the National Wilderness Preservation System. Optimum aggregate levels of wilderness acreage in Montana is beyond the scope of this document.

126C. The Wilderness Act of 1964 and the Federal Land Policy and Management Act of 1976 consider that multiple use and wilderness can be compatible. Wilderness is recognized as one of the components of multiple use as defined by the Multiple Use-Sustained Yield Act of 1960. The Act reads, "Some of the land will be used for less than all of the resources . . . with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return on the greatest unit output." Wilderness is not a "let alone zone" or an area with no management. Given the problems of visitor impacts, visitor use measurement, fire management in wilderness, sanitation and maintenance of natural processes, wilderness management poses great challenges.

126D. It is clear from two House Committee on Interior and Insular Affairs Reports (95-620 and 95-1321) that grazing will not be curtailed in wilderness areas as a function of that designation, that new water facilities and other developments may be constructed in wilderness areas with adequate protection for wilderness values and existing facilities may be maintained with occasional use of motorized equipment. The Bureau's Final Wilderness Management Policy, September 1981, reflects Congressional intent, especially where grazing management is concerned.

There would be little or no increase in livestock numbers in wilderness areas. Any adjustments in the level of livestock grazing will be made through the normal land use planning process. Adjustments in grazing preference will not be made solely on the basis of wilderness designation, but on the needs of the resources, range condition and other resource related factors.

126E. Existing facilities could not be maintained within designated wilderness. Some new facilities to benefit range resource could be constructed to enhance the apparent naturalness of the area. The rugged terrain and tall vegetation help to decrease the impact of range developments in the Cow Creek WSA. The preferred alternative in Cow Creek contains no gas leases on over 80 percent of the acreage. As operators can explore and develop pre-FLPMA leases with minimum regulation, this resource could be developed.

126F. The State has expressed the desire to trade out of inholdings inside BLM wilderness areas.

126G. The Antelope Creek WSA contains outstanding opportunities for solitude, especially in the western 9,600-acre Partial Wilderness Alternative 1. This segment (the western roadless area) does not stand on its own merits. Its contiguity with CMR enhances the wilderness values of size and opportunity for solitude. The 2,750-acre eastern parcel, Partial Wilderness Alternative 2, is impacted to some degree by its proximity to U.S. 191. The Bureau has looked carefully at the IBLA case you allude to, Tri County Cattlemen's Association, and other IBLA decisions related to the Wilderness review process. A distinction is made between those areas which the Secretary has authority to study under Sections 202 and 302 of FLPMA and those which fall under the statutory mandate to report to the President under Section 603 of

FLPMA. Authority exists to study all of the areas you mention and the BLM has chosen to do so. The mandate to report recommendations applies (at least) to the west roadless area in Antelope Creek and the southern roadless area in Seven Blackfoot.

Mike Comola

127A. Your general comments in support of additional wilderness areas will be considered in the final decision of Congress concerning the wilderness designation of these areas.

Dick Knox

128A. See response to the same statement made at Winifred, Montana Public Hearing.

Robert Vandervere

129A. Most of the recreational use of the WSAs recommended for wilderness is associated with hunting and river use. The majority of these users are physically able to withstand the rigors of this rugged country. The FEIS identifies an impact to vehicle-dependent persons who might travel the vehicle ways to view the spectacular scenery available in the study areas and surrounding river breaks.

Bill Cunningham

130A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

Larry Johnson

131A. The Bureau of Land Management is required by its Congressional mandate, the Federal Land Policy and Management Act of 1976, to administer its lands according to principles of multiple use and sustained yield. We are required to operate in a manner "which recognizes the nation's need for domestic sources of minerals, food, timber and fiber from the public lands . . ." Our governing legislation also provides for preservation of certain public lands in their natural condition.

Ed Madej

132A. We did not project large increases in use either on the Wild and Scenic River or in the WSAs.

Cleo Phillips

133A. See response to the same statement made at Winifred, Montana Public Hearing.

Robert Sivertsen

134A. The inventory was conducted using established published procedures. The inventory in the Missouri Breaks was mainly conducted by full-time Bureau employees with primarily western United States backgrounds who saw these areas under a variety of seasons, times of day and moisture conditions.

134B. Public participation in this program is well documented in the Appendix and has occurred at the local level during the inventory phase and study phase of the review process.

134C. Congressional intent to maintain grazing in wilderness areas is clear. While it is true that Congressional intent may change, it is highly unlikely that Congress will ban grazing in wilderness areas.

Marjorie Boyce

135A. Congressional intent to maintain grazing in wilderness areas is clear. While Congress has the right to amend the laws governing wilderness designation and management, Congress also tends to make its land management decisions in reflection of current economic and political trends. Given the probable national course in the foreseeable future, it is highly unlikely that Congress will ban grazing in wilderness areas.

135B. There is discussion in Chapter 1 involving fire suppression, predator control and noxious weed treatment for each WSA.

Lorraine Schwenke

136A. See response to same statement (No. 121) made at the Winifred, Montana Public Hearing.

Robert French

137A. There are provisions in the BLM Wilderness Management Policy of September 1981 to permit maintenance of existing water improvements and the construction of new projects under certain conditions. The use of motorized equipment may continue for certain situations involving established livestock grazing operations.

137B. The State of Montana has indicated its willingness to exchange out of state inholdings in BLM wilderness areas. In case this does not occur, State lands will be considered similar to private inholdings. Adequate access to the lands will be provided along routes which will cause the least lasting impact upon wilderness values.

137C. The overall dimensions of Cow Creek measure approximately 3 miles by 1 ½ miles. In the single projection where the width is 1/4 mile, the surrounding private lands are undeveloped. Solitude is exemplary throughout the WSA.

Milan Pavlovick

138A. There are a variety of range improvements in both Cow Creek and Antelope Creek WSAs documented in the FEIS. It is BLM's position that these improvements are substantially unnoticeable in the WSA as they are small, well screened and are insignificant in the context of the general natural appearance of the areas.

138B. Landowners will continue to control much of the access to designated areas. In the case of all five areas recommended for wilderness, there is some degree of public access available. We hope that the ranching community will continue its practice of generally permitting the public access to these large blocks of public land.

Don Simpson

139A. See response to same statement made at Winifred, Montana, public hearing.

Ed Butcher

140A. See response to same statement at Winifred, Montana, public hearing.

Rudy Stulc

141A. The definition of wilderness in the 1964 Wilderness Act states in part that candidate areas must "have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." The ridgetop trails which Mr. Stulc describes were taken into account when the determination of apparent naturalness of the area was made.

141B. There has been no attempt to eliminate roads from Cow Creek or Antelope Creek WSA to create an "artificial" wilderness. Cherry-stemming is a reasonable method of drawing boundaries to allow the study of all lands in a unit possessing wilderness characteristics.

Ed Grady

142A. The inventory phase of the BLM Wilderness Review involved all public lands in the Lewistown and Miles City Districts.

142B. The Bureau has documented where man's works remain inside the study areas. It is our position that we have not ignored manmade impacts, but have rather found them to be not a significant adverse influence either singly or overall on the apparent naturalness of the WSAs.

142C. The State section inholding in Cow Creek is clearly documented in the FEIS. This section, if not acquired by the BLM, contains similar wilderness values as the adjoining BLM lands. There is already adequate vehicle access to the State section from the Winter Ridge Road. No additional road is necessary through the BLM. If the grazing permittee for this section requires vehicle access for maintenance of facilities it would be allowed even if Cow Creek were designated as wilderness.

In both Cow Creek and Antelope Creek, the existing reservoirs, springs, fences, vehicle trails, etc. have been taken into account in determining that the unit appears essentially natural. All pre-FLPMA leases that existed in these WSAs have expired. It is BLM's position that the borders recommended in the proposed alternative constitute a manageable boundary.

Eleanor Arguimbau

143A. Several of the units which are included in the "conservationist alternative" that you have recommended were dropped from further Wilderness Review in the State Director's Final Decision: Montana Wilderness Inventory, 1980. That decision for Bullwacker and acreage additions to Stafford, Ervin Ridge and Cow Creek were appealed to the Interior Board of Land Appeals. The result was that the State Director's Decision remained unchanged.

Jay Mitchell

144A. We based our evaluation of the minerals in Seven Blackfoot on the comments solicited from industry as well as on the geology and past drilling history of the general area. The six industry ratings for Seven Blackfoot ranged from 1 (low potential) to 3 (moderate potential). USGS has rated the area as moderate for both oil and gas.

Larry Blasing

145A. There is no commercial forest land identified in any of the WSAs. Low intensity inventories in the 1960s identified very small patches of isolated lands capable of producing 20 cubic feet per acre per year.

APPENDIX 1.1: EXCERPTS FROM BLM MANAGEMENT FRAMEWORK PLAN

The following are excerpts from the five management framework plans (MFPs) and the two transition management framework plans that will be amended at the time a final decision on wilderness designation is made by Congress. Five MFPs were prepared in 1977 at the beginning of the wilderness review process. They were therefore somewhat limited in the scope of management recommendations regarding wilderness. This document serves to update these MFPs by evaluating areas selected as wilderness study areas and making recommendations as to those areas suitable or unsuitable for wilderness designation. The two transition MFPs were prepared in draft in 1981. They recommend that Musselshell Breaks and Terry Badlands be designated wilderness, pending recommendations made in this Suitability Report/EIS and final action by Congress.

OBJECTIVES	RECOMMENDATIONS	DECISIONS
	South Bearpaw MFP	
To identify and protect lands in the planning area of high wilderness value and of adequate size for inclusion into the National Wilderness System.	R-8.1 All areas within the planning unit of predominately public land which meet the basic criteria of 1) 5,000 or more acres or of a manageable size to maintain essential wilderness characteristics, 2) roadless and 3) primitive character will be inventoried for wilderness characteristics and possible inclusion into the National Wilderness System by 1991. Lands in the planning unit presently identified as perhaps meeting the above criteria include: Spring Creek (QPpr-001), Chip Creek (QPpr-002), Sand Creek (QPpr-003), Missouri Breaks (QPpr-004) and Bullwacker Creek (QPpr-005).	Recreation Recommendation R-8-1 is accepted.
	R-8.2 All wilderness study areas will be managed so as to preserve their wilderness characteristics. All current activities can continue subject to controls in order to protect wilderness values. Under the Organic Act, this provides for the continuation of existing mining use, grazing use and mineral leasing in the same manner and degree as was being conducted on October 21, 1976.	Accept the Multiple-Use Recommendation.
	Phillips MFP	
To identify and protect lands in the planning area of high wilderness value and of adequate size for inclusion into the National Wilderness System.	R-6.1 All areas within the planning unit of predominately public land which meet the basic criteria of 1) 5,000 or more acres or of a manageable size to maintain essential wilderness characteristics, 2) roadless and 3) primitive character will be inventoried for wilderness characteristics and possible inclusion into the National Wilderness System by 1991. Lands in the planning unit presently identified as perhaps meeting the above criteria include Sage Creek, Burnt Lodge, Indian Lake, Dry Lake, Flat Creek, White Rock Coulee, Dry Fork and Slippery Ann Creek, Bull Creek, Antelope Creek (West Antelope), East Frenchman Creek, West Frenchman Creek, Black Coulee I, Black Coulee II and Cottonwood Creek.	Recreation Recommendation R-6.1 is accepted.
	R-6.2 All wilderness study areas will be managed so as to preserve their wilderness characteristics. All current activities can continue subject to controls in order to protect wilderness values. Under the Organic Act, this provides for the continuation of existing mining use, grazing use and mineral leasing in the same manner and degree as was being conducted on October 21, 1976.	Accept the Multiple-Use Recommendation.
	Fergus MFP	
To identify and protect lands in the planning area of high wilderness value and of adequate size for inclusion into the National Wilderness System.	R-7.1 All areas within the planning unit of predominately public land which meet the basic criteria of: 1) 5,000 or more acres or of a manageable size to maintain essential wilderness characteristics; 2) roadless; and 3) of primitive character will be inventoried for wilderness characteristics and possible inclusion into the National Wilderness System by 1991. Lands in the planning unit presently identified as perhaps meeting the above criteria include: Ppr-001 Dog Creek South Ppr-002 Chimney Bend Ppr-003 Woodhawk Ppr-004 Two Calf Creek Ppr-005 Armells Creek Ppr-006 Carrol Coulee Ppr-007 Square Butte	Recreation Recommendation R-7.1 is accepted.

	7-7.2 All wilderness study areas will be managed so as to preserve their wilderness characteristics. All current activities can continue subject to controls in order to protect wilderness values. Under the Organic Act, this provides for the continuation of existing mining use, grazing use and mineral leasing in the same manner and degree as was being conducted on October 21, 1976.	Accept the Multiple-Use Recommendation.
	Valley MFP	
To identify and protect lands in the planning area of potential wilderness value and of adequate size for inclusion into the National Wilderness System.	R-15.1 All areas within the planning unit of predominately public land which meet the basic criteria of: 1) 5,000 or more acres or of a manageable size to maintain essential wilderness characteristics; 2) roadless and; 3) of primitive character will be inventoried for wilderness characteristics and possible inclusion into the National Wilderness System by 1991. Lands in the planning unit presently identified as perhaps meeting the above criteria include: Ppr-001 Burnt Lodge Ppr-002 Timber Creek Ppr-003 Gravel Hill Ppr-004 Carpenter Creek Ppr-005 Bomber Ppr-006 Dog Creek North Ppr-007 Grant Creek Ppr-008 Lone Tree Ppr-009 Sage Creek	Recreation Recommendation R-7.1 is accepted.
	R-15.2 All wilderness study areas will be managed so as to preserve their wilderness characteristics. All current activities can continue subject to controls in order to protect wilderness values. Under the Organic Act, this provides for the continuation of existing mining use, grazing use and mineral leasing in the same manner and degree as was being conducted on October 21, 1976.	Accept the Multiple-use Recommendations.
	Musselshell MFP	
Field check public property within the Planning Unit to accurately assess those areas which qualify for formal wilderness study.	R-1.1 Submit the (18,000 + acre) Seven Blackfoot Area for for review as a potential Wilderness Area (QPpr-076 on overlay).	Accept Step 2 Multiple-Use Recommendation.
	Jordan/North Rosebud	
Provide for the protection of all wilderness values now present in the Musselshell Breaks until such time as Congress acts on the issue and implements proper management tools thereafter, if a wilderness is created.	W-1.1 Recommend that the Musselshell Breaks WSA be designated a component of the National Wilderness Preservation System. (Preliminary Recommendation, subject to modification in subsequent wilderness EISs). If the WSA is not designated a component of the wilderness system, then the area will revert to multiple use management.	
	W-1.2 Recommend that all inholdings within the perimeter of the Musselshell Breaks WSA be acquired by purchase or exchange.	
	W-1.3 ORV activities should be limited to existing vehicle ways, (as designated by wilderness inventory) except as specifically authorized.	
	W-1.4 Manage the Musselshell Breaks WSA MT-024-677 consistent with the Interim Management Policy and Guidelines for Lands Under Wilderness Review (dated 12-12-79) until action by the Congress.	
	New Prairie Transition MFP	
Provide for the protection of all wilderness values not present in the Terry Badlands until such time as Congress acts on the issue and implements proper management tools thereafter, if a wilderness is created.	W-1.1 Recommend that the Terry Badlands WSA be designated a component of the National Wilderness Preservation System. (Preliminary Recommendation, subject to modification in subsequent EIS). If not so designated, this area will revert to multiple use management.	

W-1.2
Recommend that all inholdings within the perimeter of the Terry Badlands WSA be acquired by purchase or exchange.

W-1.3
ORV activities should be limited to existing vehicle ways, (as designated hy wilderness inventory) except as specifically authorized.

W-1.4
Manage the Terry Badlands WSA MT-020-684 consistent with the Interim Management Policy and Guidelines for Lands Under Wilderness Review (dated 12-12-79) until approved by the Congress.

Source: BLM, 1981

APPENDIX 1.2: CHRONOLOGY OF THE WILDERNESS REVIEW

1) March 1978 - The Fergus, Valley, Phillips, South Bearpaw and Musselshell MFPs were signed by the State Director. The wilderness inventory and recommendations involving wilderness study and potential management options were address in each of the four documents involved in the proposed suitability study and EIS. A review of each of the MFP documents has been conducted in accordance with the provisions of the planning regulations 1601.8(b)(1). It was determined that the plans have been developed with adequate public participation.

2) February 1978 - Draft Wilderness Inventory Handbook. BLM issued draft procedures for conducting the review of Bureau managed lands for wilderness characteristics as mandated by FLPMA. The draft was discussed at more than 60 public meetings held throughout the western states. Some 5,000 letters were sent to the BLM on proposed inventory procedures.

3) September 1978 - Inventory Handbook (Blue Book). This document incorporated public comments on the draft handbook and outlined final procedures on inventory.

4) November 1978 - State Director announced the beginning of the wilderness inventory process.

5) November 1978 - Northern Tier accelerated inventory announced in Federal Register.

6) December 1978 - Public meetings in Jordan and Terry on Northern Tier accelerated inventory for Terry Badlands.

7) March 1979 - Proposal to designate Terry Badlands as a wilderness study area. This proposal was followed by a 30 day public review.

8) April 1979 - State Director issued the Proposed Initial Inventory Decision. A mailing list of approximately 3,000 persons and organizations were mailed a map identifying initial inventory areas. A 90 day public comment period followed the map release.

9) April 1979 - Public meetings were held in Ekalaka, Broadus, Jordan on the Proposed Initial Inventory Decision.

10) May 1979 - Public meetings were held in Glasgow, Malta, Havre, Lewistown, Billings and Lovell. At these meetings, the public was informed of all procedures involved in the wilderness process up to designation as a wilderness study area. Specific comments were solicited on a unit by unit basis.

11) May 1979 - Final decision was made to designate Terry Badlands as a WSA. A 30 day appeal period followed. There were no appeals.

12) A contract was awarded to the Wilderness Institute, University of Montana, to prepare a content analysis of public input from the 90 day public comment period on the initial inventory decision. A document was published on July 16, 1979, which was incorporated into the final initial inventory decisions. Five hundred seventy-nine groups, organizations and individual's comments were analyzed in this document.

13) August 1979 - The Final Initial Wilderness Inventory Decision was released. This included a map and document. Approximately 3,000 persons and groups received the information on the final initital inventory.

14) December 12, 1979 - Interim Management Policy and Guidelines for Lands Under Wilderness Review was released to the public.

15) March 1980 - The Montana Intensive Wilderness Inventory Proposed Decision was released. A map and document were published and mailed to over 3,000 individuals and organizations. An extended five month (150 day) public comment period began March 31, 1980.

16) April 1980 - Public workshops were held in Glasgow, Malta, Havre, Lewistown, Billings and Lovell covering the Montana Intensive Wilderness Inventory Proposed Decision. Information on specific inventory units was solicited and questions were answered on individual units and on the wilderness evaluation process.

17) May 1980 - Open houses on the Montana Wilderness Inventory Proposed Decision held in Jordan, Broadus, Ashland and Miles City.

18) August 30, 1980 - The extended public comment period ended on the proposed inventory decision. Content analysis was prepared from these comments by the Montana State Office of Public Affairs. This data was incorporated into the State Director's final decision. Seven thousand nine hundred written comments were received and analyzed in making the Final Decision.

19) November 15, 1980 - State Director announced the Final Decision Montana Wilderness Inventory. A 45 day protest period began.

20) December 31, 1980 - Protest period ends.

21) March 1981 - The State Director sent registered mail decisions on the protests received in December, 1980. These decisions were based on the merits of the individual protests. In cases where site specific review was necessary BLM staff along with the protesting group made trips to the area.

22) The public was notified of their right to appeal or make notice of their intent to appeal protest decisions within 30 days. The following is a list of areas within the general study area that have been appealed to IBLA. Several of the inventory units had more than one appeal; some groups or individuals wanted acreage or units added while others wanted them dropped.

Unit Name	Unit Number	Acreage Deletions	Acreage Additions
Wall	MT-066-249		6,700+
Stafford	MT-066-250	4,700	2,477
Ervin Ridge	MT-066-253		8,400
Bullwacker	MT-066-255		10,000
Cow Creek	MT-066-256	36,200	8,000
Antelope Creek	MT-065-266	12,340	
Dog Creek South	MT-068-244	5,230	
Chimney Bend	MT-068-245		12,500
Woodhawk	MT-068-246	7,855	

23) May 15, 1981 - The Federal Register Notice of Intent to Study 10 Wilderness Study Areas was released to the public. This notice set open house dates for discussion of the planning process and the issues to be analyzed in the Draft Suitability Report/EIS.

24) May-June 1981 - Open houses to discuss the Missouri Breaks Wilderness Suitability Study were held in Lewistown, Jordan, Glasgow, Malta and Havre.

25) July 16, 1981 - Federal Register notice was released announcing the inclusion of Terry Badlands and Musselshell Breaks as part of the Draft Missouri Breaks Wilderness Suitability Report/EIS.

26) May 24, 1982 - Draft Missouri Breaks Suitability Report/EIS released to public for 60 day review and comment.

Source: BLM, 1981

May 21, 1981

Dear Citizen:

The Bureau of Land Management is starting the study of ten Wilderness Study Areas (WSAs) in the Missouri Breaks region of central Montana. Seven of the WSAs are in BLM's Lewistown District and three are administered by our Miles City District. The two District Offices will work together on the effort, but the Lewistown District Office will have the direct responsibility for completing the study. The areas that we'll be studying are:

Dog Creek South	Fergus Co.	5,230 Acres	MT-068-244	Antelope Creek	Phillips Co.	12,340 Acres	MT-065-266
Woodhawk	Fergus Co.	7,855 Acres	MT-068-246	Burnt Lodge	Phillips Co. and Valley Co.	15,000 Acres	MT-065-278
Stafford	Blaine Co.	4,700 Acres	MT-066-250	Billy Creek	Garfield Co.	3,480 Acres	MT-024-633
Ervin Ridge	Blaine Co.	12,000 Acres	MT-066-253	Seven Blackfoot	Garfield Co.	19,677 Acres	MT-024-657
Cow Creek	Blaine Co. and Phillips Co.	36,200 Acres	MT-066-256	Bridge Coulee	Garfield Co.	5,650 Acres	MT-024-675

The BLM's decision to study these particular areas was subject to appeal. Appeals, or notices of intent to appeal, have been received on Dog Creek South, Woodhawk, Ervin Ridge, Stafford, Cow Creek and Antelope Creek. In addition, notices of intent to appeal have been received for two units (The Wall and Chimney Bend) that BLM had dropped from further Wilderness Study. All appeals will be heard by the Department of the Interior's Board of Land Appeals. If the Board's decisions drop or add WSAs, within a reasonable amount of time, the scope of this project could be revised to incorporate their findings.

I'd like to ask you to help us begin by making sure that we know all the issues that should be part of our study. I've enclosed a summary of the issues that arose during our two-year inventory of wilderness characteristics. If you wish to add to the list or clarify any issues, I've arranged two open houses to discuss them:

On May 27, 1981, at the Lewistown District Office on Airport Road in Lewistown, between 2:00 and 7:00 p.m.
On May 28, 1981, at the VFW Club in Jordan, between 6:30 and 9:00 p.m.

In addition to the open houses, BLM personnel will be available from 8:30 a.m. to 4:30 p.m. along the Hi-Line:

On Tuesday, June 9th in the Valley Resource Area Office in Glasgow.
On Wednesday, June 10th in the Phillips Resource Area Office in Malta.
On Thursday, June 11th in the Havre Resource Area Office in Havre.

In addition to identifying issues, you may wish to discuss the "Planning Criteria" that BLM will use to arrive at our recommendations. I've included a summary of those criteria which were described in the Draft Wilderness Study Policy that has been available since January.

If you couldn't attend either of the open houses and can't stop by the Resource Area Offices, please take time to write. It would be most helpful if we could hear from you by June 27, 1981.

Thank you for your help so far and I look forward to working with you throughout the study.

Sincerely yours,

for Glenn W. Freeman
District Manager

Enclosure

MISSOURI BREAKS WILDERNESS STUDY

THE STUDY

The study will result in the publication of a Wilderness Plan Amendment/Environmental Impact Statement (WPA/EIS) by September 30, 1982. In developing the WPA/EIS, a team of BLM resource specialists, representing each of the multiple uses of public lands, will determine conflicts or benefits that would result from wilderness designation for each study area. A preliminary recommendation will then be forwarded, after public review, to the Secretary of the Interior. The Secretary will make recommendations to the President and the President will then send his recommendations to Congress. Congress will make the final decision whether or not an area should be actually designated as Wilderness. At the time Congress makes their decision, the management plan for the affected planning area will be amended by reference to the WPA/EIS. Management plans for Wilderness areas will be prepared only after an area is designated by Congress.

THE ISSUES

Since the wilderness inventory was started in November 1978, the public has provided much comment about the wilderness characteristics of the ten wilderness study areas in the Missouri River Breaks. BLM has also received substantial comment on how designation would affect the historical uses of the Breaks and these are the issues that will be considered through the multiple resource analysis.

The following are summaries of the major comments BLM received during the inventory:

1. Wilderness would interfere with, or eliminate, grazing on public lands.
2. Wilderness would interfere with, or eliminate, oil and gas exploration and production on public lands.
3. Wilderness designation would protect the land in a natural condition.
4. Wilderness would interfere with, or eliminate, treatment of noxious weeds.
5. Wilderness would eliminate use of motor vehicles for hunting, grazing management, or recreation uses.
6. The Breaks are a unique ecotype.
7. An area would no longer be accessible by older populations.
8. Wilderness would bring unwarranted attention by outsiders.
9. The Breaks are a historically significant area which should be preserved.
10. Wilderness would change density and composition of wildlife.
11. Wilderness would interfere with fighting wildfire.
12. The Breaks have high scenic value.
13. Wilderness in the "Wild and Scenic" River Corridor would be double protection.
14. Wilderness would reduce land or loan values for grazing operations.
15. Wilderness designations would preserve an area for solitude and undeveloped outdoor recreation.
16. Wilderness would limit construction or maintenance of range facilities.
17. The land would remain the same without a wilderness designation.
18. Wilderness designation would protect watershed and eliminate some erosion by eliminating road building and use.
19. The areas would be too small and not manageable.
20. The areas are not natural; there are signs of past use by man.
21. Wilderness would be long term preservation for future generations.
22. There is too much wilderness in Montana already.
23. Wilderness would be used only by the rich.
24. Designated wilderness in the Breaks would be a national resource.
25. There is no drinking water available in the areas.
26. Congress did not intend wilderness designation for open prairie and river breaks.

THE ALTERNATIVES AND PLANNING CRITERIA

Study alternatives will include options of all wilderness and no wilderness within a particular study area. Any number of partial wilderness options, based on resource conflicts, may be included as well. The Draft Wilderness Study Policy describes nine national planning criteria which will be used to define alternatives and to deal with the issues. The criteria are:

1. BLM will determine what resource values are present and whether or not any of those values would be lost through designation. The analysis must show that resource values gained, including wilderness values, outweigh resource uses lost over the long term. The interdisciplinary team approach will be used to accomplish the objectives of this criteria.

2. The involvement of the public, in particular local populations, will be solicited throughout the process. Resource specialists will consult with affected public land users such as ranchers, oil and gas interests, recreationists, and wilderness users. Once alternatives, including the preferred alternative are developed, a draft study report will be released and public comments will be fully considered before a final decision is made.

3. Whenever possible resource values will be analyzed in terms of their economic effects on local communities or surrounding regions. Local and national attitudes concerning wilderness designation will also be considered.

4. Energy and critical mineral resource values have a significant impact on the suitability of a Wilderness Study Area. Existing information on geological structures, advice from the minerals industry, and evaluations by U.S. Geological Survey and Bureau of Mines will all be used in determining the effects of wilderness designation on the supply of minerals.

5. Throughout the study process, the alternatives will be consistent with other Bureau or Federal agency plans as well as State and local resource use plans.

6. The study will consider the loss of resource uses if an area is designated as wilderness.

7. The loss of existing wilderness character if an area is not designated will be considered.

8. All areas have been evaluated to see if they contain the minimum characteristics to qualify for further study. The decision on suitability requires consideration of supplemental values exceeding the minimum. Access, valid pre-existing rights, size, and proximity of off-site impacts will be carefully analyzed.

9. The study team will consider how a particular unit increases the diversity of the National Wilderness Preservation System and how the additional land would enhance the overall system.

Source: BLM, 1981

APPENDIX 2.1: LEGAL DESCRIPTIONS OF WILDERNESS STUDY AREAS

Dog Creek South WSA

T. 23 N., R. 17 E. Principal Meridian, Montana

Section 19: Lots 19 & 20
Section 20: Lots 5, 6, 7, & 8
Section 26: SW1/4, S1/2SE1/4
Section 27: Lots 1, 2, 4, S1/2NE1/4, SE1/4NW1/4, S1/2
Section 28: Lots 3, 4, 5, 6, S1/2NW1/4, S1/2
Section 29: All
Section 30: Lots 1, 2, 8, 9, 14, E1/2NE1/4 SW1/4NE1/4, SE1/4
Section 31: Lots 1, 7, 8, 9, 10, 15, 16, E1/2 N1/2SW1/4
Section 32: All
Section 33: N1/2NE1/4, W1/2
Section 34: NE1/4SE1/4
Section 35: NE1/4NE1/4, W1/2NE1/4, NW1/4

T. 22 N., R. 17 E. Principal Meridian, Montana

Those portions north of Dog Creek Road in Sections 5 & 6
Those portions north of Dog Creek Road in Lot 4, SW1/4NW1/4, Section 4

Stafford WSA

T. 23 N., R. 17 E. Principal Meridian, Montana

Section 13: S1/2S1/2
Section 14: S1/2SE1/4
Section 15: Those lands south of Birch Creek Hill Road
Section 20: Lot 1, S1/2NE1/4
Section 21: Those lands south of Birch Creek Hill Road in NE1/4NE1/4; Lots 1, 5, W1/2NE1/4, SE1/4NE1/4, NW1/4, NE1/4SW1/4, N1/2SE1/4, SW1/4SE1/4
Section 22: Lots 1, 2, NE1/4, S1/2NW1/4, N1/2SW1/4 and those lands south of Birch Creek Hill Road in N1/2NW1/4
Section 23: Lots 1, 3, N1/2, NE1/4SW1/4, SE1/4
Section 24: All
Section 25: Lots 1, 2, 3, 4, NE1/4, N1/2NW1/4, SE1/4, NW1/4
Section 26: Lots 1, 5, NE1/4NE1/4
Section 28: Lot 2

T. 23 N., R. 18 E. Principal Meridian, Montana

Section 18: Lot 4
Section 19: Lots 1, 2, & 4
Section 27: Those lands south of Boiler Bottoms Road in Lot 7
Section 28: Those lands south of Boiler Bottoms Road in S1/2
Section 29: S1/2N1/2, S1/2
Section 30: Lots 1, 2, 3, 5, E1/2, E1/2NW1/4 NE1/4SW1/4
Section 31: Lots 1 & 2
Section 32: Lots 1, 2, 3, & 4
Section 33: Lots 2, 3, 4, N1/2NW1/4, and those lands south of Boiler Bottoms Road in Lot 1, NW1/4NE1/4
Section 34: Lot 3

Ervin Ridge WSA

T. 23 N., R. 19 E. Principal Meridian, Montana

Section 1: Lots 1, 2, 3, 4, 6, 7, & 8

T. 23 N., R. 20 E. Principal Meridian, Montana

Section 1: Lots 1, 2, 3, 4, 5, 6, 10, SW1/4NW1/4
Section 2: Lots 1, 2, 3, 4, 5, 6, 7, S1/2N1/2, N1/2SW1/4, SW1/4SW1/4, NW1/4SE1/4
Section 3: All
Section 4: All
Section 5: Lots 1, 2, 3, 4, 5, 6, 7, 11, S1/2N1/2, NE1/4SE1/4
Section 6: Lots 1, 2, 3, 4, 5, 6, 7, 8, S1/2NE1/4, SE1/4NW1/4
Section 9: Lots 1, 3, 4, N1/2NE1/4
Section 10: Lots 1, 2, 3, & 4
Section 11: Lot 3

T. 24 N., R. 19 E. Principal Meridian, Montana

Section 22: Those lands south of Lone Tree Ridge Road in NE1/4NE1/4, S1/2, N1/2, NW1/4NW1/4, S1/2; excluding oil and gas road in S1/2SW1/4
Section 23: Those lands south of Lone Tree Ridge Road
Section 24: Those lands south of Lone Tree Ridge Road
Section 25: All
Section 26: Those lands north of Barnard Ridge Road .
Section 27: Those lands north of Barnard Ridge Road excluding oil and gas road in N1/2N1/2

T. 24 N., R. 20 E. Principal Meridian, Montana

Section 19: Those lands south of Lone Tree Ridge Road
Section 25: Those lands south of Ervin Ridge Road
Section 26: Those lands south of Ervin Ridge Road
Section 27: Those lands south of Ervin Ridge Road
Section 29: Those lands south of Ervin Ridge Road
Section 30: Those lands south of Lone Tree Ridge Road and Ervin Ridge Road
Section 31: All
Section 32: Lots 1, 2, 3, 4, S1/2N1/2, N1/2S1/2, and those lands south of Ervin Ridge Road and Bird Road in NW1/4NE1/4, N1/2NW1/4
Section 33: Lots 1, 2, 3, 4, NE1/4, NE1/2NW1/4, S1/2NW1/4, N1/2S1/2, excluding Bird Road
Section 34: All, excluding Bird Road in W1/2
Section 35: All

Antelope Creek WSA

T. 23 N., R. 22 E. Principal Meridian, Montana

Section 10: Those lands south and east of Power Plant Ferry Road
Section 11: Those lands south of the county road (Power Plant Ferry Road) and west of Fortress Butte Road
Section 13: S1/2NE1/4, S1/2SW1/4, SE1/4
Section 14: W1/2E1/2, W1/2, E1/2SE1/4, and those lands south and west of Fortress Butte Road in the E1/2NE1/4
Section 15: Those lands south and east of the Power Plant Ferry Road
Section 22: E1/2 and those lands east of the Power Plant Ferry Road in NW1/4, NE1/4SW1/4
Section 23: All
Section 24: All
Section 25: Lots 1, 3, N1/2, NE1/4SW1/4, SE1/4
Section 26: Lots 3, 4, NE1/4, N1/2NW1/4

T. 23 N., R. 23 E. Principal Meridian, Montana

Section 7: S1/2
Section 8: Those lands west of Hideaway Ridge Road in W1/2SW1/4
Section 17: S1/2S1/2 and those lands west of Hideaway Ridge Road in W1/2NW1/4, NW1/4SW1/4
Section 18: Lots 1, 2, 3, 4, W1/2E1/2, SE1/4NE1/4, E1/2W1/2, E1/2SE1/4 and those lands west of Hideaway Ridge Road in NE1/4NE1/4
Section 19: All
Section 20: All
Section 21: Those lands west of Antelope Ridge Road
Section 26: S1/2NW1/4, SW1/4
Section 27: S1/2N1/2, S1/2
Section 28: NW1/4NE1/4, S1/2NE1/4, NE1/4, S1/2, and those lands west and south of the 2,880 foot elevation contour, excluding Antelope Ridge Road
Section 29: All
Section 30: All
Section 31: Lots 1, 2, 3, 6, NE1/4, E1/2NW1/4, N1/2SE1/4, SE1/4SE1/4
Section 32: All
Section 33: All, excluding Antelope Ridge Road
Section 34: All
Section 35: W1/2, W1/2SE1/4, SE1/4SE1/4

Woodhawk WSA

T. 23 N., R. 21 E. Principal Meridian, Montana

Section 1: Lots 8, 9, S1/2SE1/4, and those lands east of Woodhawk Trail in Lot 6 and SW1/4
Section 11: SE1/4 and those lands south of Woodhawk Trail in NE1/4
Section 12: E1/2, SW1/4, and those lands south and east of Woodhawk Trail in the NW1/4
Section 13: All, excluding DeWeese Ridge Road
Section 14: E1/2, excluding DeWeese Ridge Road
Section 21: Those lands east of Woodhawk Trail in E1/2
Section 22: All
Section 23: All
Section 24: All
Section 25: N1/2 and those lands north of the DeMars Road in the S1/2
Section 26: N1/2, N1/2S1/2, and those lands north of the DeMars Road in the S1/2S1/2
Section 27: All
Section 28: SE1/4SE1/4 and those lands east of Woodhawk Trail in NE1/4, N1/2SE1/4
Section 34: Those lands north of the county road and west of DeMars Road in NE1/4, E1/2NW1/4
Section 35: Those lands north of DeMars Road in NW1/4NW1/4

T. 23 N., R. 22 E. Principal Meridian, Montana

Section 6: Lots 16, 17, 18, 19, 22, 23, 24, 25, 26, 27, 28, 33, & 34
Section 7: Lots 3, 4, 5, 6, 11, 12, 13, 14, 15, 16, 17, & 18
Section 8: Lot 2
Section 17: Lots 2, 3, SW1/4NW1/4
Section 18: Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, NE1/4, N1/2SE1/4
Section 19: Lots 3, 4, 5, and those lands west of DeMars Road in Lots 11 & 12

Cow Creek WSA

T. 23 N., R. 22 E. Principal Meridian, Montana

Section 1: Those lands excluding the Dead Cedar Road and north and west of the Power Plant Ferry Road
Section 2: All, excluding the Dead Cedar Road and including Dead Cedar Reservoir
Section 3: Lots 1 thru 20, N1/2S1/2, and those lands north of the Cow Island Recreation Road in the S1/2S1/2
Section 4: Lots 1 thru 20, N1/2, S1/2, and those lands north of the Cow Island Recreation Road in the S1/2S1/2
Section 5: Lots 1 thru 11, 14 thru 19, and those lands north of the Cow Island Recreation Road in the S1/2
Section 6: Lots 1 thru 10
Section 9: Those lands north of the Cow Island Recreation Road in the N1/2N1/2
Section 10: Those lands north and east of the Cow Island Recreation Road in the NE1/4NE1/4
Section 11: Those lands north of the Power Plant Ferry Road in the N1/2
Section 12: Those lands north and west of the Power Plant Ferry Road in the NW1/4

T. 23 N., R. 23 E. Principal Meridian, Montana

Section 6: Those lands north of the Power Plant Ferry Road in Lots 2, 3, 4, and excluding the Dead Cedar Road in Lot 4

T. 23 N., R. 21 E. Principal Meridian, Montana

Section 1: Lots 1, 2, & 7

T. 24 N., R. 22 E. Principal Meridian, Montana

Section 7: Lots 1, 2, 3, 7 thru 13, and those lands east of Badland Ridge Road in Lots 4, 5, 6, 14, & 15
Section 8: All
Section 9: All
Section 10: All
Section 11: Lot 4, SW1/4, and those lands west of Cabin Creek Road in Lot 3
Section 13: SW1/4NW1/4, S1/2
Section 14: All, excluding the Winter Ridge Road
Section 15: All, excluding the Winter Ridge Road
Section 17: All
Section 18: Lot 1, NE1/4, N1/2SE1/4, SE1/4SE1/4, and those lands east of Badland Ridge Road in Lot 2
Section 20: E1/2E1/2, NW1/4NE1/4, NE1/4NW1/4
Section 21: All
Section 22: All, excluding the Winter Ridge Road
Section 23: All, excluding the Winter Ridge Road
Section 24: All
Section 25: N1/2, N1/2S1/2, and those lands north of the Shetland Divide Road in the S1/2S1/2
Section 26: All, excluding the Winter Ridge Road to and including the reservoir in NE1/4SE1/4, Sec. 27
Section 27: All, excluding the Winter Ridge Road to and including the reservoir in NE1/4SE1/4, Sec. 27
Section 28: All
Section 29: E1/2E1/2
Section 32: NE1/4NE1/4
Section 33: All
Section 34: All
Section 35: All

T. 24 N., R. 23 E. Principal Meridian, Montana

Section 5: Lots 2, 3, SW1/4NE1/4, SE1/4NW1/4, E1/2SW1/4, NW1/4SE1/4, and those lands east of the Saskatchewan Butte Road in Lot 4, SW1/4NW1/4 and east of livestock maintenance road in W1/2SW1/4
Section 6: Lot 4
Section 7: All
Section 8: W1/2NW1/4, SW1/4
Section 17: W1/2W1/2, SE1/4SW1/4, S1/2SE1/4, and those lands south and east of the Shetland Divide Road in NE1/4SE1/4 and excluding the Shetland Divide Road in SE1/4SW1/4, SW1/4SE1/4
Section 18: All
Section 19: All, excluding the Shetland Divide Road
Section 20: All, excluding the Shetland Divide Road
Section 21: NW1/4NE1/4, S1/2NE1/4, NW1/4, S1/2, and those lands south and west of the livestock maintenance road in NE1/4NE1/4 and excluding Coyote Coulee Ridge Road
Section 22: SW1/4, S1/2SE1/4, and those lands south of the Coyote Coulee Road in S1/2NW1/4, SW1/4NE1/4, N1/2SE1/4, and lands between Coyote Coulee Road and livestock maintenance road in W1/2NW1/4
Section 26: Those lands north and west of Power Plant Ferry Road in NW1/4SW1/4
Section 27: W1/2E1/2, W1/2, N1/2SE1/4, and those lands north and west of the Power Plant Ferry Road in the S1/2SE1/4
Section 28: All
Section 29: All
Section 30: All
Section 31: All
Section 32: N1/2, N1/2S1/2, and those lands north and west of the Power Plant Ferry Road in the S1/2S1/2
Section 33: N1/2, N1/2SW1/4, and those lands north of the Power Plant Ferry Road in the SW1/4SW1/4, N1/2SE1/4
Section 34: N1/2NW1/4

T. 25 N., R. 21 E. Principal Meridian, Montana

Section 1: Those lands less than the 3,200 foot elevation contour
Section 2: Those lands less than the 3,200 foot elevation contour
Section 11: Those lands east of Spencer Cow Camp Road
Section 12: S1/2NE1/4NE1/4, SE1/4NE1/4, SW1/4NW1/4, S1/2, and those lands lower than the 3,200 foot elevation contour in N1/2NE1/4NE1/4, W1/2NE1/4, N1/2NW1/4, SE1/4NW1/4
Section 13: N1/2, SE1/4, and those lands north and east of Badland Ridge Road in the SW1/4
Section 24: Those lands east of the Badland Ridge Road
Section 25: Those lands east of the Badland Ridge Road

T. 25 N., R. 22 E. Principal Meridian, Montana

Section 6: S1/2SW1/4SW1/4, SE1/4SW1/4, S1/2NE1/4SE1/4, SE1/4NW1/4SE1/4, S1/2SE1/4, and those lands below the 3,200 foot elevation contour in the SW1/4NW1/4, Lot 4
Section 7: All, excluding Squaw Creek Road
Section 8: NW1/4NW1/4
Section 17: W1/2NE1/4, SE1/4NE1/4, W1/2, SE1/4, excluding Squaw Creek Road in W1/2SW1/4
Section 18: All, excluding Squaw Creek Road
Section 19: All, excluding Squaw Creek Road
Section 20: All, excluding Squaw Creek Road
Section 26: Those lands west of Cabin Creek Road in W1/2
Section 27: E1/2
Section 28: NW1/4NE1/4, NE1/4NW1/4, W1/2W1/2
Section 29: All
Section 30: All, excluding Squaw Creek Road in NE1/4NE1/4
Section 31: All
Section 32: All
Section 33: S1/2SW1/4
Section 34: All

T. 25 N., R. 23 E. Principal Meridian, Montana

Section 31: Those lands east of the Saskatchewan Butte Road in the E1/2SW1/4

T. 26 N., R. 21 E. Principal Meridian, Montana

Section 35: Those lands below the 3,200 foot elevation contour in the S1/2S1/2

Burnt Lodge WSA

T. 23 N., R. 33 E. Principal Meridian, Montana

Section 1: Lots 1, 2, 3, S1/2NE1/4, SE1/4NW1/4, N1/2SE1/4
Section 10: S1/2NE1/4, N1/2SE1/4
Section 11: NE1/4NE1/4, S1/2N1/2, N1/2SW1/4, SE1/4SW1/4, SE1/4
Section 12: W1/2NW1/4, S1/2
Section 13: All
Section 14: E1/2E1/2, NW1/4NE1/4, NE1/4NW1/4, SW1/4SE1/4
Section 21: S1/2SW1/4
Section 22: SE1/4SW1/4, S1/2SE1/4
Section 23: NE1/4, S1/2
Section 24: All
Section 25: All
Section 26: All
Section 27: E1/2, S1/2NW1/4, SW1/4
Section 28: E1/2, NE1/4NW1/4, N1/2SW1/4, SE1/4SW1/4
Section 29: SE1/4NE1/4, NE1/4SE1/4
Section 32: S1/2N1/2, NE1/4NW1/4, and those lands east of Ball Rock Road in the NE1/4SW1/4, SE1/4
Section 33: E1/2, S1/2NW1/4, SW1/4
Section 34: All

T. 23 N., R. 34 E. Principal Meridian, Montana

Section 4: Those lands south and west of Plum Creek Road
Section 5: Those lands south and west of Plum Creek Road
Section 6: All
Section 7: All
Section 8: All
Section 9: Those lands south and west of Plum Creek Road
Section 10: Those lands south and west of Plum Creek Road
Section 15: Those lands south and west of Plum Creek Road
Section 17: All
Section 18: Lots 1, 2, 3, 4, NE1/4, E1/2NW1/4, NE1/4SW1/4, E1/2SE1/4, NW1/4SE1/4
Section 19: Lots 1, 2, 3, 4, S1/2NE1/4, E1/2W1/2, SE1/4
Section 20: W1/2NE1/4, E1/2NW1/4

T. 24 N., R. 34 E. Principal Meridian, Montana

Section 31: Those lands south of Plum Creek Road in the S1/2N1/2, S1/2
Section 32: Those lands south of Plum Creek Road in the SW1/4SW1/4

Bridge Coulee WSA

T. 17 N., R. 30 E. Principal Meridian, Montana

Section 4: Those lands south of the Smith Ridge Road in the SW1/4
Section 5: Those lands south of the Smith Ridge Road in the S1/2
Section 6: Those lands south of the Smith Ridge Road in the S1/2S1/2
Section 7: Lots 2, 3, 4, NE1/4NE1/4, S1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SE1/4
Section 8: All
Section 9: W1/2, W1/2SE1/4, SE1/4SE1/4, and those lands south of Smith Ridge Road in NE1/4SE1/4
Section 10: Those lands south and west of Smith Ridge Road in the W1/2SW1/4
Section 15: Those lands west of Smith Ridge Road in the N1/2NW1/4
Section 17: All
Section 18: All
Section 19: E1/2, E1/2NW1/4, and those lands east of county road in Lots 1, 2, NE1/4SW1/4
Section 20: All
Section 21: N1/2, N1/2S1/2, and those lands north of Bridge Ridge Road in S1/2S1/2
Section 28: Those lands north of Bridge Ridge Road in N1/2NE1/4 and west of said road in W1/2W1/2
Section 29: N1/2, SW1/4, and those lands north and west of Bridge Ridge Road in SE1/4
Section 30: N1/2NE1/4, SE1/4NE1/4, and those lands east of county road and Bridge Ridge Road in SE1/4
Section 31: Those lands north and east of Bridge Ridge Road in NE1/4NE1/4
Section 32: Those lands north of Bridge Ridge Road in N1/2

Musselshell Breaks WSA

T. 15 N., R. 30 E. Principal Meridian, Montana

Section 1: N1/2SW1/4 and those lands south and west of county road in Lots 7 & 8, S1/2NW1/4
Section 2: Lots 5, 6, 7, 8, SW1/4NE1/4, S1/2NW1/4, SW1/4, W1/2SE1/4
Section 3: All
Section 4: All
Section 9: Lots 1, 2, & 3
Section 10: N1/2, N1/2NE1/4SW1/4, and those lands east of Williams Ridge Road in SE1/4
Section 11: N1/2, N1/2S1/2, SE1/4SW1/4, S1/2SE1/2, and those lands north and east of Williams Ridge Road in SW1/4SW1/4
Section 12: S1/2NE1/4, SW1/4NW1/4, N1/2SW1/4, SE1/4
Section 14: Those lands north of Williams Ridge Road in N1/2

T. 15 N., R. 31 E. Principal Meridian, Montana

Section 7: Lots 8, 9, E, and those lands west of the county road in Lots 7, 10 & D
Section 18: Lots 6, 7, 8, 9, and those lands west of county road in Lot 5 and north of Williams Ridge Road in Lot 10

T. 16 N., R. 30 E. Principal Meridian, Montana

Section 15: Those lands south of Haley Ridge Road in SW1/4SW1/4
Section 20: Lots 1, 11, 12, & 22
Section 21: E1/2, E1/2NW1/4, SW1/4NW1/4, SW1/4
Section 22: Those lands south of Haley Ridge Road
Section 23: Those lands south of Haley Ridge Road and west of county road
Section 26: W1/2W1/2, SE1/4NW1/4, and those lands south and west of county road in NW1/4NE1/4, NE1/4NW1/4
Section 27: All
Section 28: Lots 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 15, 16, 17, & 18
Section 29: Lots 1, 20, and those lands in W1/2 Lot 18
Section 32: Lot 7, NE1/4SE1/4
Section 33: All
Section 34: All
Section 35: W1/2NW1/4, SW1/4, SW1/4SE1/4, and those lands south and west of Shell Ridge Road in SE1/4SE1/4

Billy Creek WSA

T. 21 N., R. 34 E. Principal Meridian, Montana

Section 1: All
Section 2: Lots 1, 2, 3, 4, S1/2N1/2, excluding ridge road in Lot 4, SW1/4NW1/4
Section 3: Lots 1, 3, 3, 4, S1/2N1/2, NE1/4SW1/4, N1/2SE1/4, SE1/4SE1/4, excluding ridge road in Lot 1, SE1/4NE1/4, and ridge road in SW1/4NW1/4
Section 4: All, excluding ridge road in NE1/4
Section 5: Those lands east of Billy Creek Road
Section 8: NE1/4NE1/4
Section 9: All
Section 10: W1/2NW1/4

T. 21 N., R. 35 E. Principal Meridian, Montana

Section 6: Lots 2, 3, 4, 5, 6, SW1/4NE1/4, SE1/4NW1/4, excluding the ridge road in Lots 2, 3, SW1/4NE1/4, SE1/4NW1/4

Seven Blackfoot WSA

T. 20 N., R. 33 E. Principal Meridian, Montana

Section 1: All
Section 2: All
Section 3: Lot 1, SE1/4NE1/4, E1/2SE1/4
Section 12: N1/2NE1/4, SW1/4NE1/4, NE1/4NW1/4

T. 20 N., R. 34 E. Principal Meridian, Montans

Section 1: SE1/4SW1/4
Section 2: Lots 3, 4, SW1/4NE1/4, S1/2NW1/4, SW1/4, SE1/4SE1/4
Section 3: All
Section 4: All
Section 5: All
Section 6: Lots 1 thru 9, 11, 12, 13, 14, E1/2SW1/4
Section 7: Lot 1, NE1/4NW1/4
Section 8: NE1/4NE1/4
Section 9: All
Section 10: All
Section 11: N1/2NE1/4, SW1/4NE1/4, W1/2
Section 12: NE1/4, N1/2NW1/4
Section 14: W1/2
Section 15: All
Section 23: NW1/4, E1/2SW1/4, SW1/4SE1/4

T. 20 N., R. 35 E. Principal Meridian, Montana

Section 7: Lot 1 and those landa weat of county road in NE1/4NW1/4

T. 21 N., R. 33 E. Principal Meridian, Montana

Section 8: E1/2
Section 17: E1/2, S1/2NW1/4, SW1/4
Section 18: Those lands east of Herman Ridge Road in SE1/4NE1/4
Section 20: NE1/4, N1/2NW1/4
Section 21: N1/2 and those lands north of county road in N1/2SW1/4, NW1/4SE1/4
Section 22: N1/2, SE1/4
Section 23: All
Section 24: N1/2, SW1/4, W1/2SE1/4, excluding Seven Blackfoot Trail in NE1/4
Section 25: W1/2NE1/4, SE1/4NE1/4, W1/2, SE1/4 excluding North Sawmill Creek Road
Section 26: All, excluding North Sawmill Creek Road
Section 27: NE1/4NE1/4, S1/2N1/2, N1/2SW1/4, SE1/4SW1/4, SE1/4 excluding North Sawmill Creek Road in W1/2NE1/4
Section 33: SE1/4SW1/4, S1/2SE1/4
Section 34: E1/2, E1/2NW1/4, SW1/4
Section 35: All

T. 21 N., R. 34 E. Principal Meridian, Montana

Section 5: Those lands west of Billy Creek Road
Section 8: NW1/4NW1/4, S1/2NW1/4, SW1/4
Section 17: W1/2, NW1/4SE1/4, and those landa west of Billy Creek Road in W1/2NE1/4
Section 19: Lota 1, 2, 3, E1/2, E1/2W1/2, and those lands north and east of Seven Blackfoot Trail in Lot 4
Sectioo 20: E1/2NE1/4, W1/2, SE1/4SE1/4
Section 21: SW1/4NW1/4, W1/2SW1/4, SW1/4SE1/4, and those lands south and west of Billy Creek Road in N1/2NW1/4
Section 27: Those lands south and weat of Billy Creek Road in S1/2NW1/4, NE1/4SW1/4
Section 28: All
Section 29: All
Section 30: Lota 3, 4, NE1/4, NE1/4NW1/4, N1/2SE1/4, SE1/4SE1/4
Section 31: All, excluding Seven Blackfoot Trsil
Section 32: All, excluding Seven Blackfoot Trail
Section 33: W1/2, W1/2SE1/4, SE1/4SE1/4, excluding Seven Blackfout Trail
Section 34: SW1/4SW1/4

Terry Badlands WSA

T. 12 N., R. 48 E. Principal Meridian, Montana

Section 12: E1/2
Section 24: NE1/4, NE1/4SE1/4

T. 12 N., R. 49 E. Principal Meridian, Montana

Section 1: All
Section 2: All
Section 4: SW1/4NE1/4, SW1/4NW1/4, SW1/4, W1/2SE1/4
Section 5: All
Section 6: All
Section 7: All
Section 8: All
Section 9: All
Section 10: All, excluding Calypso Trail in NE1/4NE1/4
Section 12: All, excluding Calypso Trail in SW1/4SW1/4
Section 13: All, excluding Calypso Trail in N1/2
Section 14: All
Section 15: All
Section 17: All
Section 18: All
Section 19: All
Section 20: All
Section 21: All
Section 22: All
Section 23: All
Section 24: All
Section 26: N1/2
Section 28: N1/2
Section 29: All
Section 30: All
Section 31: All
Section 32: All
Section 33: N1/2, SW1/4
Section 34: All
Section 35: All

T. 13 N., R. 49 E. Principal Meridian, Montana

Section 26: South of existing road running thru N1/2
Section 34: All
Section 35: All

T. 11 N., R. 49 E. Principal Meridisn, Montana

Section 1: All
Section 2: All
Section 3: Lots 1, 2, 3, 4, S1/2N1/2, SW1/4, W1/2SE1/4
Section 4: All
Section 6: Lots 1, 2, 4, 5, 6, SW1/4NE1/4, and those lands north of Custer Creek Road in Lot 3, SE1/4NW1/4
Section 9: Those lands north and east of Custer Creek Road
Section 10: All
Section 11: All
Section 12: E1/2
Section 13: All
Section 14: E1/2, N1/2SW1/4, SE1/4SW1/4
Section 15: Those lands north and east of Custer Creek
Section 22: Those lands north and east of Custer Creek in NE1/4
Section 23: Those lands north of Custer Creek
Section 24: NW1/4NE1/4, SE1/4NE1/4, N1/2NW1/4, and those lands north of Custer Creek in SW1/4NE1/4, S1/2NW1/4

T. 11 N., R. 50 E. Principal Meridian, Montana

Section 6: Lots 2, 3, 4, 5, 6, 7, SW1/4,NE1/4 SE1/4NW1/4, E1/2SW1/4, NW1/4SE1/4
Section 18: Lots 1, 2, 3, NE1/4NW1/4, and those landa west of existing road in Lots 5, 6, NW1/4NE1/4, SE1/4NW1/4
Section 19: Lots 1, 2, west of existing road

T. 12 N., R. 50 E. Principal Meridian, Montana

Section 1: All
Section 2: All, excluding Terry Scenic Overlook Road in Lot 2
Section 3: All
Section 4: All
Section 5: All
Section 6: All
Sectioo 7: All
Section 8: All
Section 9: All
Section 10: All
Section 11: All
Section 12: All
Section 14: Lots 5, 6, 7, 8, N1/2N1/2
Section 15: Lots 3, 4, 5, 6, 7, N1/2NE1/4, NW1/4, W1/2SW1/4
Section 18: All, excluding Calypso Trail
Section 20: All, excluding Calypso Trail
Section 21: All, excluding Calypso Trail
Section 22: Lot 4
Section 28: Those lands west county road and railroad R/W in Lots 2, 3, W1/2, NW1/4SE1/4, excluding Calypso Trail
Section 29: All
Section 30: All
Section 31: All
Section 32: W1/2NE1/4, E1/2SW1/4, W1/2SE1/4, and those lands west of existing road in E1/2E1/2
Section 33: Those lands north and west of existing road in Lots 1, 2, NW1/4, and excluding patent lands

T. 13 N., R. 50 E. Principal Meridian, Montana

Section 30: Lot 7 and those lands south of existing road in Lots 5, 6, SE1/4SW1/4, S1/2SE1/4
Section 31: Lots 1, 2, 3, 4, S1/2NE1/4, E1/2W1/2, SE1/4, and those lands south of existing road in N1/2NE1/4
Section 32: Those landa south of existing road in N1/2
Section 34: Those landa south of existing road in S1/2

T. 12 N., R. 51 E. Principal Meridian, Montana

Section 6: All

Source: BLM, 1981

APPENDIX 3.1: WILDLIFE OCCURRENCE AND RELATIVE ABUNDANCE

WSA Unit Species (#/mi² WSA)	Dog Creek South	Stafford	Ervin Ridge	Woodhawk	Cow Creek	Antelope Creek	Bridge Coulee	Musselshell Breaks	Billy Creek	Seven Blackfoot	Burnt Lodge	Terry Badlands
BIG GAME												
Mule Deer	2.5-10.0	2.5-12.0	2.5-10.0	2.5-12.0	2.5-10.0	2.5-10.0	4.2-5.5	2.5-5.0	4.2-4.6	4.2-14.5	3.0-5.0	1.5-2.5
White-tailed Deer	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.0-0.2	0.2-0.3	0.0-0.1	0	0.0-0.2	0	0.0-0.1
Elk	0	0	0	0.0-0.2	0.0-0.2	0.7-1.2	0	0	0	0	7.5-9.0	0
Pronghorn Antelope	0	0	0.5-1.0	0	0.0-0.2	0.0-0.2	0	0	1.0-2.5	0.1-0.2	0	0.0-0.2
UPLAND GAME BIRDS												
Sage Grouse	1.0-2.4	0.1-1.0	1.0-2.0	0.1-1.0	1.0-2.4	1.0-2.0	0	0.0-0.1	0	0.0-0.3	0.0-0.1	0.4-1.5
Sharp-tailed Grouse	0.1-0.5	0.1-0.5	0.0-0.3	1.0-2.0	0.1-0.5	0.1-0.5	0.1-0.3	0.2-0.3	0.0-0.1	0.0-0.3	0.0-0.2	0.4-0.9
Ring-necked Pheasant	0	0.0-0.2	0	0	0	0	0	0.0-0.1	0	0.0-0.1	0.0-0.1	0.0-0.1
Hungarian Partridge	0.1-0.3	0.0-0.2	0.1-0.2	0.2-0.3	0.1-0.2	0.1-0.2	0	0.1-0.2	0	0	0	0.4-1.0
Merriam Turkey	0	0	0	0	0	0	0	0	0.0-0.5	1.0-3.0	0	?
WATERFOWL												
Duck	0	0.3-0.7	0.1-0.5	1.6-2.0	0.1-0.5	0.1-0.4	0	0	0	0.1-0.6	0	0.1-1.0
Geese	0	0	0.1-0.4	0.5-1.9	0	0	0	0	0	0	0	0.1-0.7
FURBEARING												
Bobcat	0	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1	0.0-0.1	0	0	0	0.0-0.1	0.0-0.1	0.1-0.2
Mountain Lion	0	0	0	0	0.0-0.1	0	0	0	0	0.0-0.1	0	0.0-0.1
Beaver	0.1-0.2	0.0-0.1	0.0-0.1	0.2-0.5	0	0.0-0.1	0	0	0	0	0	0.1-0.2
Fisheries Reservoirs												
Cold Water	0	0	0	0	0	0	0	0	0	0	0	0
Warm Water	0	0	0	0	1	0	0	0	1	1	0	0
PREDATORS												
Coyote	0.1-0.2	0.1-0.2	0.1-0.3	0.1-0.3	0.1-0.3	0.1-0.2	0.1-0.3	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.2	0.1-0.3

Sources:
1. Montana Department of Fish, Wildlife and Parks, Federal Aid Project FW-3-R, Middle Misouri River Wildlife Study, Jobs 1A, 1B, & 1C
2. Montana Department of Fish, Wildlife and Parks, Federal Aid Project W-120-R, Montana Deer Studies, Study BG-100, Job 3: Mule deer population study, White-tailed deer populstion study — Eastern Montana Breaks and River bottom.
3. Montana Department of Fish, Wildlife and Parks, Research Bureau (Sponsored by BLM, Contract #YA-512-CRB-217). Terry Badlands Nongame survey and Inventory, Final Report.
4. Montana Department of Fish, Wildlife and Parks, Rough draft, Missouri River Breaks Elk Management Plan, 1980.
5. C. Robert Watts, Region 4 Fish and Wildlife Biologist, Personal Communication.
6. Kerry T. Constan, Region 4 Fish and Wildlife Biologist, Personal Communication.

APPENDIX 3.2: SOIL MAPPING UNITS OF THE WSAs

All WSAs are very similar in soil and watershed characteristics. The following list of key soil mapping units shows the similarity of soils for all 12 WSAs. Analysis of the Soil and Watershed Alternatives (Chapter 4) was made with the following assumptions:

1. Soil and watershed recover from surface disturbances very slowly.

2. Natural geologic erosion in all the WSAs is the most influential factor affecting soil erosion, sediment production and water quality.

3. The accelerated erosion caused by livestock grazing, construction and maintenance of watering facilities, motorized vehicle use and mineral exploration and development are all very minimal compared to the natural geologic erosion.

4. Livestock grazing, along with other uses will continue, to a certain extent, throughout the study and may continue if an area is designated wilderness.

STAFFORD - Soil Mapping Units

Blaine County	Percent Slopes	Percent of Area
49 - Shale outcrop	35-80	40
67B - Marmarth clay loam	0-4	2
101 - Ustic Torrifluvents, wet	0-2	1
150 - Cabbart-Delpoint loams	8-35	3
167 - Marmarth-Cabbart	2-8	3
350 - Cabbart-Rock outcrop, shale	25-60	28
519 - Yamac-Benz	0-4	10

Chouteau County	Percent Slopes	Percent of Area
3 - Lisam-Rock outcrop, shale	8-45	3
8 - Cabbart-Rock outcrop, shale	25-60	1
10 - Badland		5
16 - Bascovy-Neldore	25-50	2
23 - Ustic Torriorthents-Ustic Torrifluvents	0-8	1
24 - Benz	2-6	1

ERVIN RIDGE - Soil Mapping Units

Blaine County	Percent Slopes	Percent of Area
46 - Neldore-Dilts-Rock outcrop	25-60	28
49 - Shale outcrop	35-80	30
145 - Bascovy clay	2-8	7
146 - Neldore-Dilts clay	8-35	4
346 - Rock outcrop, shale-Lisam	25-70	1
350 - Cabarat-Rock outcrop, shale	25-60	25
519 - Yamac-Benz	0-4	5

COW CREEK - Soil Mapping Units

Blaine County	Percent Slopes	Percent of Area
19 - Havre Loam	0-2	1
46 - Neldore-Dilts-Rock outcrop	25-60	11
49 - Shale outcrop	35-80	12
101 - Ustic Torrifluvents, wet	0-2	3
145 - Bascovy clay	2-8	2
146 - Neldore-Dilts clay	8-35	1
150 - Cabbart-Delpoint loams	8-35	1
161C - Twilight-Riedel fine sandy loam	4-8	1
161D - Twilight-Riedel fine sandy loam	8-20	1
167 - Marmarth-Cabbart	2-8	1
245 - Bascovy-Neldore	2-8	1
326 - Marvan-Vascovy clays	2-8	2
350 - Cabbart-Rock outcrop, shale	25-60	5
446 - Lisam-Wabek	25-45	1
519 - Yamac-Benz	0-4	1

Phillips County	Percent Slopes	Percent of Area
3 - Dilts-Rock outcrop, shale-forested	35-60	18
5 - Bascovy-Dilts-Weingart	8-25	3
7 - Bascovy	2-8	3
8 - Dilts-Rock outcrop, shale	25-70	5
9 - Dilts-Bascovy	15-45	3
10 - Dilts-Cabbart-Rock outcrop, sandstone	35-60	8
11 - Harlem-Marvan	0-4	4
13 - Elloam-Tealette	0-4	2
14 - Elloam-Thoeny	0-6	3
17 - Cabbart-Twilight	15-35	4
18 - Twilight-Cabbart	4-15	3

ANTELOPE CREEK - Soil Mapping Units

Phillips County	Percent Slopes	Percent of Area
1 - Rock outcrop, shale-Dilts	35-75	16
3 - Dilts-Rock outcrop, shale-forested	35-60	25
4 - Vaeda	1-8	3
5 - Bascovy-Dilts-Weingart	8-25	2
8 - Dilts-Rock outcrop, shale	25-70	12
9 - Dilts-Bascovy	15-45	4
10 - Dilts-Cabbart-Rock outcrop, sandstone	35-60	16
11 - Harlem-Marvan	0-4	5
14 - Elloam-Thoeny	0-6	5
17 - Cabbart-Twilight	15-35	6
18 - Twilight-Cabbart	4-15	2
27 - Sunburst-Dilts	15-45	4

BURNT LODGE - Soil Mapping Units

Phillips County	Percent Slopes	Percent of Area
1 - Rock outcrop, shale-Dilts	35-75	15
3 - Dilts-Rock outcrop, shale-forested	35-60	13
8 - Dilts-Rock outcrop, shale	25-70	9
10 - Dilts-Cabbart-Rock outcrop, sandstone	35-60	4
17 - Cabbart-Twilight	15-35	4
18 - Twilight-Cabbart	4-15	3
27 - Sunburst-Dilts	15-45	2

Valley County	Percent Slopes	Percent of Area
18 - Ustic Torrifluvents	0-2	3
41E - Cabbart-Delpoint	9-35	8
48E - Lisam-Dilts	5-35	7
100E - Rock outcrop		9
148E - Lisam-Dilts-Rock outcrop	9-35	15
200F - Badland		8

DOG CREEK - Soil Mapping Units

Fergus County	Percent Slopes	Percent of Area
118C - Tanna-Abor	2-8	5
227D - Yamac-Delpoint-Yawdim	4-25	6
300 - Rock outcrop		55
803A - Havre loam	0-2	1
803C - Yamac loam	2-8	5
814C - Kobar silty clay loam	2-8	5
816E - Kobar silty clay loam, gullied	2-25	5
949E - Abor-Thebo-Crago	15-45	10
1072E- Neldore-Thebo clays	25-60	1
1105 - Havre and Harlem-occasionally flooded	0-2	3
1127C- Delpoint-Yawdim	4-8	3
1527F- Yawdim-Delpoint-Rock outcrop	25-50	1

WOODHAWK - Soil Mapping Units

Fergus County	Percent Slopes	Percent of Area
227D - Yamac-Delpoint-Yawdim	4-25	1
278C - Gerdrum-Absher	2-8	1
300 - Rock outcrop		16
370C - Neldore-Thebo clays	4-25	1
470F - Neldore-Rock outcrop	15-60	54
472C - Thebo clay	2-8	1
472D - Thebo clay	8-25	1
570B - Marias silty clay	2-8	1
803C - Yamac loam	2-8	2
814C - Kobar silty clay loam	2-8	2
816E - Kobar silty clay loam, gullied	2-25	1
1105 - Havre and Harlem, occasionally flooded	0-2	5
1803A- Havre silty clay loam	0-2	2
2043C- Marmarth-Cabbart loams	4-8	1
2470F- Dilts-Julin-Rock outcrop	15-60	12

SEVEN BLACKFOOT - Soil Mapping Units

Garfield County	Percent Slopes	Percent of Area
4 - Yamac-Gerdrum	4-12	1
7 - Badlands-Lambeth	25-70	47
14 - Ustic Torrifluvents-Borollic Camborthids	0-10	6
15 - Evanston-Ethridge	0-10	2
16 - Cabbart-Lambeth-Yawdim	35-70	10
17 - Lambeth-Riedel-Busby	20-50	2
18 - Lambeth-Dilts-Busby	15-60	6
20 - Lambeth-Badlands-Yawdim	25-70	22
23 - Evanston-Gerdrum-Cabbart	8-25	4

BILLY CREEK - Soil Mapping Units

Garfield	Percent Slopes	Percent of Area
4 - Yamac-Gerdrum	4-12	6
7 - Badlands-Lambeth	25-70	27
15 - Evanston-Ethridge	0-10	6
16 - Cabbart-Lambeth-Yawdim	35-70	6
17 - Lambeth-Riedel-Busby	20-50	12
20 - Lambeth-Badlands-Yawdim	25-70	25
23 - Evanston-Gerdrum-Cabbart	8-25	18

Source: BLM, 1981

BRIDGE COULEE - Soil Mapping Units

Garfield	Percent Slopes	Percent of Area
15 - Evanston-Ethridge	0-10	5
17 - Lambeth-Riedel-Busby	20-50	25
18 - Lambeth-Dilts-Busby	15-60	10
20 - Lambeth-Badlands-Yawdim	25-70	35
22 - Kevin-Scobey	8-15	10
23 - Evanston-Gerdrum-Cabbart	8-25	15

TERRY BADLANDS - Soil Mapping Units

Prairie County	Percent Slopes	Percent of Area
2 - Archin-Gerdrum, channeled	0-8	1
3 - Armells-Delpoint-Yamac	15-70	2
6 - Badland		40
7 - Lisam-Rock outcrop-Cabbart	15-70	2
9 - Bonfri-Evanston	2-8	2
12 - Cabbart-Rock outcrop-Yawdim	15-70	8
13 - Camborthids-Torrifluvents	0-8	4
15 - Delpoint-Cabbart	8-25	1
16 - Gerdrum-Archin-Rock outcrop	4-20	4
17 - Delpoing-Cabbart-Yawdim	15-60	5
21 - Gerdrum-Creed	0-8	3
24 - Kremlin	0-4	3
28 - Lonna	0-8	1
29 - Lonna-Cambeth-Cabbart	4-20	2
34 - Yamac	0-8	1
35 - Yamac-Delpoint-Cabbart	4-20	1
36 - Yamac-Birney-Delpoint	4-25	1
37 - Yamac-Busby-Blackhall	4-15	4
38 - Alona	0-4	2
41 - Lisam-Rock outcrop-Abor	15-70	6
44 - Yamac-Gerdrum	4-15	7

MUSSELSHELL BREAKS - Soil Mapping Units

Garfield County	Percent Slopes	Percent of Area
7 - Badlands-Lambeth	25-70	16
14 - Ustic Torrifluvents-Borollic Camborthids	0-10	4
15 - Evanston-Ethridge	0-10	4
17 - Lambeth-Riedel-Busby	20-50	18
18 - Lambeth-Dilts-Busby	15-60	10
20 - Lambeth-Badlands-Yawdim	25-70	30
23 - Evanston-Gerdrum-Cabbart	8-25	18

APPENDIX 3.3: COMMON PLANT SPECIES IN THE WSAs

Grass and Grasslike

Common Name	Scientific Name
bluebunch wheatgrass	Agropyron spicatum
thickspike wheatgrass	Agropyron dasystachyum
western wheatgrass	Agropyron smithii
little bluestem	Andropogon scoparius
sideoats grama	Bouteloua curtipendlula
prairie sandreed	Calamovilfa longfolia
basin wildrye	Elymus cinereus
prairie Junegrass	Koeleria cristata
plains muhly	Muhlenbergia cuspidata
alkali sacaton	Sporobolus srioides
alkali cordgrass	Spartina gracilis
needleandthread	Stipa comata
green needlegrass	Stipa viridula

Half Shrub and Forb

- milkvetch	Astragalus spp.
+ Russian knapweed	Centavrea repens
- water hemlock	Cicuta douglasii
+ Canada thistle	Cirsium arvense
- poison hemlock	Conium maculatum
+ field bindweed	Convolvulus arvensis
- low larkspur	Desphinium bicolor
+ leafy spurge	Euphorbia esula
- halogeton	Halogeton glomeratus
+ dalmation toadflax	Linaria dalmatica
- white pointloco	Oxytropis spp.
* persistent sepal yellowcress	Rorippa calycina
American vetch	Vicia americana
- deathcamas	Zygadenus spp.
- cockleburr	Xantium spp.

Shrubs and Trees

big sagebrush	Artemisia tridentata
shadescale saltbush	Atriplix confertifolia
Nuttall saltbush	Atriplix nattallii
creeping juniper	Juniperus horizontalis
Rocky Mountain juniper	Juniperus scopulorum
limber pine	Pinus flexilis
- ponderosa pine	Pinus ponderosa
Douglas fir	Pseudotsuga menziesii glauca
- chokecherry	Prunus virginiana
- greasewood	Sarcobatus vermiculatus

* Sensitive
+ Noxious
- Poisonous

Source: BLM, 1981

APPENDIX 3.4: GRAZING PRIVILEGES IN THE WILDERNESS STUDY AREAS

Wilderness Study Area	Allotment Name	Mgmt. Stature	Number	Season	Federal AUMs Allotment	Federal AUMs WSA
Dog Creek South	P.N.	E	0067	05/20-11/15	1,931	489
	Iron City Island	P	0066	06/16-10/15	92	22
	Stulc	E	0081	05/01-11/30	500	34
Stafford	Gallatin Rapids	P	6222	05/10-10/27	287	167
	Golf Bench	E	6203	04/16-12/13	989	28
Ervin Ridge	Barnard Ridge	P	6209	06/01-10/31	432	137
	Black Butte	P	6211	05/01-10/01	731	145
	Ervin Ridge	P	6212	06/01-10/30	912	352
Woodhawk	Woodhawk	E	0031	05/01-10/31	3,992	753
	Reed Coulee	E*	0071	07/01-10/31	544	87
Cow Creek	Hay Coulee Common	E	6182	05/16-11/15	1,505	116
	Timber Ridge	P	6172	05/16-10/15	1,807	484
	Spencer Ridge	P	6194	12/01-03/31	587	254
	Cabin Creek	E	5609	05/01-10/31	1,156	1,001
	North Cabin Creek	P	5607	05/16-07/01	243	80
	Antelope Creek	P	5610	05/01-12/31	4,594	1,444
	Little Bullwacker	E*	6214	04/01-12/31	1,557	18
Antelope Creek	Antelope Creek	P	5610	05/01-12/31	4,594	1,022
Bridge Coulee	C.K. Cattle	E	2165	04/01-11/30	1,248	585
	Newhouse - Nordahl	Pot.	6372	04/15-11/15	769	83
Musselshell Breaks	Lyle Chamberlin	P	4847	09/01-02/28	1,063	775
	Carl Peterson	P	4849	07/16-01/15	602	282
	Carl & Larry Peterson	C	4848	03/01-02/28	155	34
	Fred Nordahl	C	4836	04/16-12/15	656	159
Billy Creek	F.S. McKeever	Pot.	2215	06/01-10/31	294	69
	Coulter Ranch	Pot.	2060	05/16-10/15	132	88
	McKeever Homestead	Pot.	2214	06/01-11/15	532	214
Seven Blackfoot	Danial & Edgar Loomis	C	2198 & 2199	05/01-10/04	148	91
	Margaret Stafford	C	2319	07/04-11/03	46	46
	George T. Wilson	P	2371	03/01-02/28 04/01-11/30	1,087	940
	Emmett Clark & Son	C	2052	06/01-09/30	102	102
	Seven Blackfoot Common	C	2260 & 2362	05/01-10/11	320	317
	McKeever Homestead	C	2214	06/01-11/15	532	202
	Phipps Ranch Inc.	C	2261 & 2262	06/01-08/31	99	49
	Dan Loomis	C	2198	03/01-02/28	28	28
	Edgar Loomis	C	2199	03/01-02/28	44	44
	Clara Bragg	C	2026	03/01-02/28	142	45
Burnt Lodge	Burnt Lodge	P	5667	05/01-10/31	601	225
	Larb Hills	P	5660	10/16-03/30	903	875
	Carpenter Creek	P	4595	11/01-07/15	5,582	915
Terry Badlands	Haughian Livestock	Pot.	2747	06/01-11/15	6,387	2,687
	Lawrence Keltner	Pot.	2754	01/01-06/30	5,937	99
	Hines Ranch	E	2750	03/01-02/28	3,187	1,833
	Cherry Creek Ranch	Pot.	2780	03/01-02/28	1,777	368
	Coffee - Nefsy Common	E	2797	05/01-11/30	168	66
	William Nefsy	E	2772	05/01-12/15	4,152	214

E — Existing AMP
P — Proposed AMP
Pot. — Potential AMP
C — Custodial

* AMP partially implemented

Source: BLM, 1981

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ACRONYMS

BLM — Bureau of Land Management

CMRFWS — Charles M. Russell National Wildlife Refuge

EIS — Environmental Impact Statement

FLPMA — Federal Land Policy and Management Act of 1976

FWS — Fish and Wildlife Service

MFP — Management Framework Plan

NPS — National Park Service

ORV — Off-Road Vehicle

WSA — Wilderness Study Area

DEFINITIONS

ACCELERATED EROSION: Erosion processes increased by the activities of man. See "EROSION."

ANIMAL UNIT MONTH (AUM): A standardized measurement of the amount of forage necessary for the complete sustenance of animal for 1 month; also, the measurement of the privilege of grazing one animal for 1 month.

CHERRY-STEM: A boundary configuration in which the boundary of a wilderness study area or proposed wilderness is drawn around a dead-end road or other linear feature so as to exclude that road or feature from the wilderness study area or proposed wilderness.

CHERRY-STEM ROAD: A dead-end road excluded from wilderness study by means of a cherry-stem. The road forms part of the boundary.

DISCOVERY: A term used in connection with mining claims. As stated in a legal ruling which has been upheld in many later decisions, it is "where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine . . ."

DRY HOLE: The universal term in the petroleum industry for an unsuccessful well, i.e., one that does not produce oil or gas in commercial quantities.

ECOSYSTEM: A complex self-sustaining natural system which includes living and nonliving components of the environment and the interactions that bind them together. Its functioning involves the circulation of matter and energy between organisms and their environment.

EROSION: The wearing away of the land surface by running water, wind, ice, or other geological agents.

FLPMA: The Federal Land Policy and Management Act of 1976 (Public Law 94-579, 90 Stat. 2743. 43 USC 1701).

HABITAT: All elements of an organism's environment needed to complete its life cycle through reproduction, including but not limited to food, cover, water, and living space in the amounts, qualities, and locations which the organism requires to complete its life cycle.

IMPACT: The effect, influence, alteration, or imprint of an activity.

IMPAIR: To diminish in value or excellence.

IMPAIR WILDERNESS SUITABILITY: Refers to activities that are considered to impair an area's suitability for preservation as wilderness — i.e., that do not satisfy the "nonimpairment criteria" set forth in Chapter I.B.2 of the Interim Management Policy (BLM, December 12, 1979).

LEASABLE MINERALS: Those minerals subject to lease by the Federal Government. Includes oil and gas, coal, geothermal, phosphate, sodium, potash and oil shale.

LEK: A site to which birds (as grouse) regularly resort for purposes of sexual display and courtship.

LOCATABLE MINERALS: Minerals subject to disposal and development through the Mining Law of 1872 (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale.

MANAGEMENT FRAMEWORK PLAN (MFP): Land use plan for public lands that provides a set of goals, objectives, and constraints for a specific planning unit to guide the development of detailed plans for the management of each resource.

MFP AMENDMENT: An amendment to a Management Framework Plan is initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or an applicant's proposed action which may result in a significant change in a portion of the approved plan.

MULTIPLE USE: ". . . The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." (From Section 103, FLPMA.)

MOTORIZED EQUIPMENT: Any machine activated by nonliving power source except small battery-powered, handcarried devices such as flashlights, shavers, Geiger counters, and cameras.

MOTOR VEHICLE: Any vehicle which is self-propelled or any vehicle which is propelled by electric power obtained from batteries.

NATURALNESS: Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From Section 2(c), Wilderness Act.)

NONSUITABLE FOR PRESERVATION AS WILDERNESS: Refers to a recommendation that certain public lands satisfy the definition of wilderness in the Wilderness Act but have been found not to be appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

OFF-ROAD VEHICLE (ORV): Any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other terrain.

OUTSTANDING: 1. standing out around others of its kind; conspicuous; prominent. 2. Superior to others of its kind; distinguished; excellent.

PLANNING AREA: The area for which resource management plans are prepared and maintained. In most instances, it is the same as the resource area, which is a geographic portion of a BLM district, under supervision of an area manager.

POPULATION CENTER: A Standard Metropolitan Statistical Area (SMSA) which has a population of 100,000 or greater. A SMSA is a county which contains at least one city of 50,000 inhabitants or more plus as many adjacent counties as are metropolitan in character and are socially integrated with that central city or cities.

POST-FLPMA: The period of time after the enactment of the Federal Land Policy and Management Act (October 21, 1976).

PRE-FLPMA: On or before October 21, 1976.

PRELIMINARY WILDERNESS RECOMMENDATION: Refers to a wilderness recommendation at any stage prior to the time when the Secretary of the Interior reports his recommendation to the President. Until the Secretary acts, the recommendation is "preliminary" because it is subject to change during administrative review.

PRIMITIVE AND UNCONFINED RECREATION: Non-motorized and nondeveloped types of outdoor recreational activities.

PUBLIC LANDS: Any land and interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except (1) lands located on the outer continental shelf and (2) lands held for the benefit of Indians, Aleuts, and Eskimos.

RANGE IMPROVEMENT: Any activity on or relating to rangelands designed to improve production of forage, change vegetation composition, control pattern of use, provide water, stabilize soil and water conditions, and enhance habitat for livestock, fish, wildlife, and wild horses and burros.

ROAD: A vehicle route which has been improved and maintained by mechanical means to ensure relatively regular and continuous use.

ROADLESS: For the purpose of the wilderness review program, this refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

Words and phrases used in the above definition of "roadless" are defined as follows:

1. Improved and maintained: Actions taken physically by man to keep the road open to vehicular traffic. "Improved" does not necessarily mean formal construction. "Maintained" does not necessarily mean annual maintenance.

2. Mechanical means: Use of hand or power machinery or tools.

3. Relatively regular and continuous use: Vehicular use which has occurred and will continue to occur on a relatively regular basis. Examples are: access roads for equipment to maintain a stockwater tank or other established water sources; access roads to maintained recreation sites or facilities; or access roads to mining claims.

SHOW: The appearance of oil or gas in cuttings, samples, or cores from a drilling well.

SOLITUDE: 1. The state of being alone or remote from habitations; isolation. 2. A lonely, unfrequented, or secluded place.

SUITABLE FOR PRESERVATION AS WILDERNESS: Refers to a recommendation that certain public lands satisfy the definition of wilderness in the Wilderness Act and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

SUPPLEMENTAL VALUES: Values that may be present in an area under consideration for wilderness, such as ecological, geological, or other features of scientific, educational, scenic, or historical value. They are not required for wilderness designation, but their presence will enhance an area's wilderness quality.

VALID MINING CLAIM: A mining claim on which a discovery has been made (see "discovery").

WAY: A vehicle route which has not been improved and maintained by mechanical means to ensure relatively regular and continuous use.

WILDERNESS AREA: An area formally designated by Act of Congress as part of the National Wilderness Preservation System.

WILDERNESS CHARACTERISTICS: Key characteristics of a wilderness listed in Section 2(c) of the Wilderness Act of 1964 and used by BLM in its wilderness inventory. These characteristics include size, naturalness, outstanding opportunities for solitude, outstanding opportunities for primitive or unconfined recreation, and supplemental values.

WILDERNESS MANAGEMENT: The management of lands which have been designated by Act of Congress as wilderness areas.

WILDERNESS RECOMMENDATIONS: A recommendation by the Bureau of Land Management, the Secretary of the Interior, or the President, with respect to an area's suitability or nonsuitability for preservation as wilderness.

WILDERNESS REPORTING: The progress of preparing the reports containing wilderness recommendations on wilderness study areas and transmitting those reports to the Secretary of the Interior, the President, and Congress.

WILDERNESS REVIEW: The term used to cover the entire wilderness inventory, study and reporting phases of the wilderness program of the Bureau of Land Management.

WILDERNESS STUDY AREA: A roadless area or island that has been inventoried and found to have wilderness characteristics as described in section 2(c) of the Wilderness Act of 1964 (78 stat. 891).

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